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CLASSIFIED CLASSIFICATION CHANGE

**CLASSIFIED**

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Felic and Technical Control Station  
Information and Technical Information Facility, NASA

(NASA-CR-63212) LUNAR ORBIT RENDIZVOUS  
REFERENCE TRAJECTORY PACKAGE. VOLUME 5E:  
REFERENCE TRAJECTORY NO. 5 (GUIDED REENTRY),  
ISSUE 4 (Bellcomm, Inc.) 83 P

N79-71945

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Reference No. 64-2020

Q65-4733

TR-64-209-7

LUNAR ORBIT RENDEZVOUS REFERENCE

TRAJECTORY DATA PACKAGE (U)

REFERENCE TRAJECTORY NO. 5  
(GUIDED RE-ENTRY)

[U]

Issue 4  
Volume 5E

October 5, 1964

Approved: *R.L.Wagner*  
Trajectory Analysis  
Department

Work Performed for Manned Space Flight, National Aeronautics  
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NASw-417

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- 6.0 RE-ENTRY EQUILIBRIUM GLIDE PHASE

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ABSTRACT

This report, Reference Trajectory No. 5 (Guided Reentry) is issued as volume 5E of Lunar Orbit Rendezvous Reference Trajectory Data Package (U), Issue 4. The first four volumes prepared by Space Technology Laboratories are as follows:

Volume 5A - Summary and Reference Trajectory No. 5 Data Exhibits, dated August 26, 1964, No. 8408-6076-RC-000

>Volume 5B - Printout Keys and Reference Trajectory No. 5 Listing (Earth Launch to LEM Final Descent), dated August 26, 1964, No. 8408-6077-RC-000

Volume 5C - Reference Trajectory No. 5 Listing Continued (LEM Final Descent to Earth Re-entry), dated August 26, 1964, No. 8408-6078-RC-000

Volume 5D - Reference Trajectory No. 5 Listing Concluded (Re-entry), dated August 26, 1964, No. 8408-6079-RC-000

The above volumes contain a complete unguided reference trajectory including the re-entry phase. This report (volume 5E) contains a guided re-entry with the same terminal conditions as the unguided re-entry of volume 5D.

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GUIDED RE-ENTRY

The Reference Trajectory Data Package to which this is appended contains an "open loop" (unguided) Apollo LOR trajectory. For the powered flight maneuvers the full optimized steering orders of the "open loop" trajectory result in good first approximations to the final guided trajectories. In the re-entry phase the correspondence between the "open loop" and guided trajectories is less close. The intent of this volume is to present the resultant LOR re-entry trajectory parameters as influenced by the closed loop control of the MIT re-entry guidance logic.

The guidance logic utilized is that defined by MIT as of July 1, 1964. The characteristics of the vehicle restated from Volume 5A are:

$$L/D \text{ max} = .4$$

$$\frac{W}{C_D A} = 57 \text{ lbs/sq. ft.}$$

$$W = 9500.0 \text{ lbs.}$$

ATMOSPHERE MODEL = U. S. Standard ATMOSPHERE, 1962

The re-entry phase is initiated 12895.8 min. from lift-off. At the point of re-entry the vehicle has a longitudinal range to go of 2151.0 naut. miles and a lateral range to go of 198.8 naut. miles to reach the landing site located

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at 18.1 degrees S latitude, 194.9 degrees E longitude. In guiding the re-entry vehicle to the desired landing site four consecutive modes of the re-entry guidance logic were utilized. From initial entry to the point of initial "pull-up" ( $RDOT=0$ ) the flight profile was the result of a fixed full positive lift-up command. Commencing at pull-up, the flight profile was under the influence of the "constant drag" guidance mode which continued until the velocity became less than 28,043 f.p.s. At this time the guidance entered the "reference trajectory" guidance mode and continued to operate in this mode until the velocity became less than 21,616 f.p.s. and the altitude rate ( $RDOT$ ) became negative. At this point in the trajectory the guidance entered the final "equilibrium glide" mode and remained at this mode until reaching the terminal conditions.

This volume contains the printout and print key plus plotted time histories of several important trajectory parameters. The equivalent information for the "open loop" re-entry trajectory is contained in Volumes 5A and 5D.

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OUTPUT KEY FOR GUIDED RE-ENTRY

X Components of the missile position in an earth centered, right handed, inertial coordinate system.

Y The system is oriented such that the X-Z plane contains the true vernal equinox of date and the X-Y plane contains the equator. The Z axis passes through the north pole. (ft)

XD Components of velocity in the earth centered inertial coordinate system. (ft/sec)

YD

ZD

XL Components of the landing site position in the earth centered inertial coordinate system. (ft)

YL

ZL

ALT Altitude with respect to the Fischer ellipsoid 1960, measured along the radius vector. (ft)

R Radial distance from the center of the earth. (ft)

RDOT Component of inertial velocity along the radius vector R. (ft/sec)

VI Magnitude of the inertial velocity. (ft/sec)

FPAI Flight path with respect to VI. Angle between the inertial velocity vector and the local geocentric horizontal, positive upward (deg.)

PSIV Azimuth from north of the inertial velocity vector projected on a plane normal to the radius vector. (deg.)

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VA      Magnitude of the velocity relative to the air mass. (ft/sec)

FPAA    Flight path with respect to the VA. Angle between the air velocity vector and the local geocentric horizontal, positive upward. (deg.)

PSAV    Azimuth from north of the air velocity vector projected on a plane normal to the radius vector. (deg.)

LAT     Geodetic latitude of the vehicle position. (deg.)

LONG    Longitude of the vehicle position. (deg.)

RTGN    Right ascension of the landing site from the vehicle position vector measured in the instantaneous plane of motion. The angle is projected to the surface of a spherical earth. (naut. mi.)

RTGL    Declination of the landing site relative to the instantaneous plane of motion. The angle is projected to the surface of a spherical earth. (naut. mi.)

ACC     Magnitude of the total acceleration vector (ft/sec<sup>2</sup>)

DRAG    Magnitude of the aerodynamic drag force acting along the relative velocity vector VA. (lbs.)

FLY     Magnitude of the aerodynamic lift force acting normal to the relative velocity vector VA and in the instantaneous relative plane of motion. (lbs.)

FLP     Magnitude of the aerodynamic lift force acting normal to the relative velocity vector VA and normal to the instantaneous relative plane of motion. (lbs.)

GLOAD   Ratio of the magnitude of the aerodynamic acceleration to the magnitude of the gravitational acceleration.

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ROLL      Roll attitude. Angle between the lift vector (defined in a plane normal to the relative velocity vector) and the line of intersection of the relative plane of motion and the plane normal to the relative velocity vector. Positive 0 to 360 degrees counter clockwise as viewed from the rear of the vehicle. 0 degrees representing maximum lift up in the relative plane of motion.  
(deg.)

RLDOT     Magnitude of the roll rate. (deg/sec)

TAG       Guidance phase indicator (1 to 6)

- 1 - guidance phase prior to initial pull up
- 2 - guidance targeting iteration phase

(determines guidance strategy) This phase occurs at the point of pull up, requiring approximately 300 to 500 milliseconds of time to complete.

3 - guidance "constant drag" or "reference trajectory" phase. For various range requirements either one or both of these phases may be required.

5 - guidance atmospheric skip phase. This phase may or may not exist as ranging requirements dictate.

6 - guidance equilibrium glide phase

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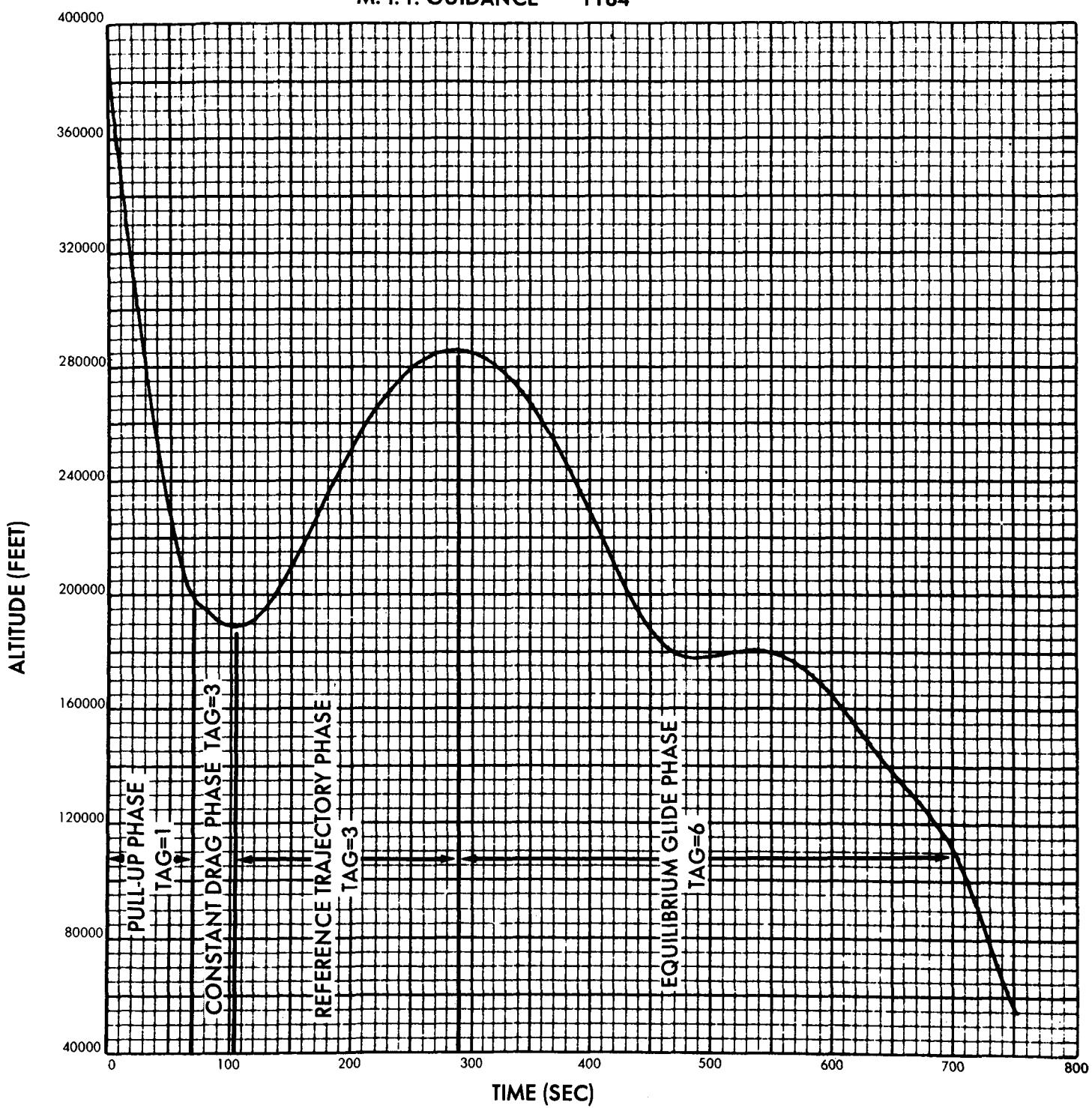


FIGURE 1 ALTITUDE

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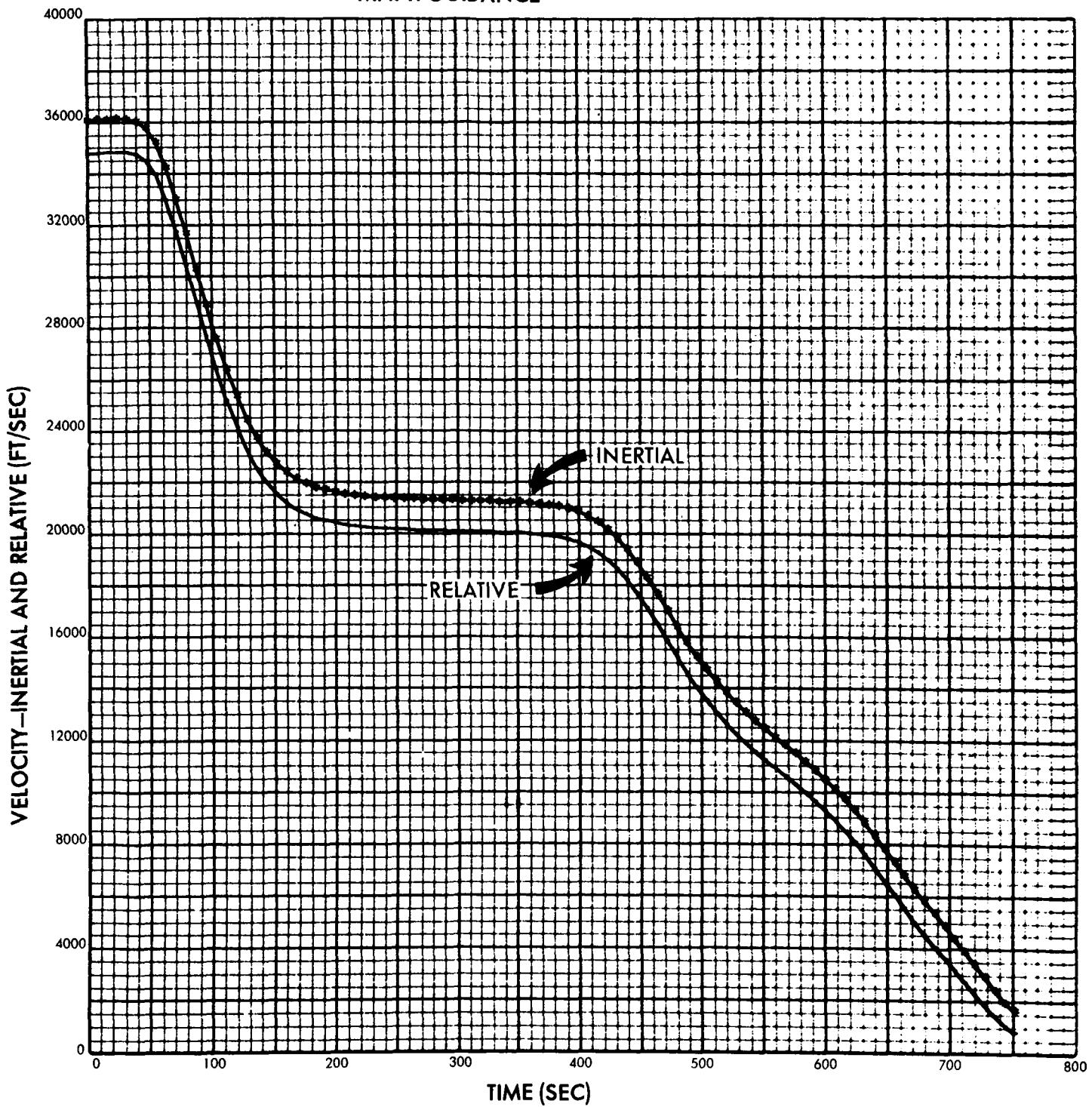


FIGURE 2 INERTIAL AND RELATIVE VELOCITY

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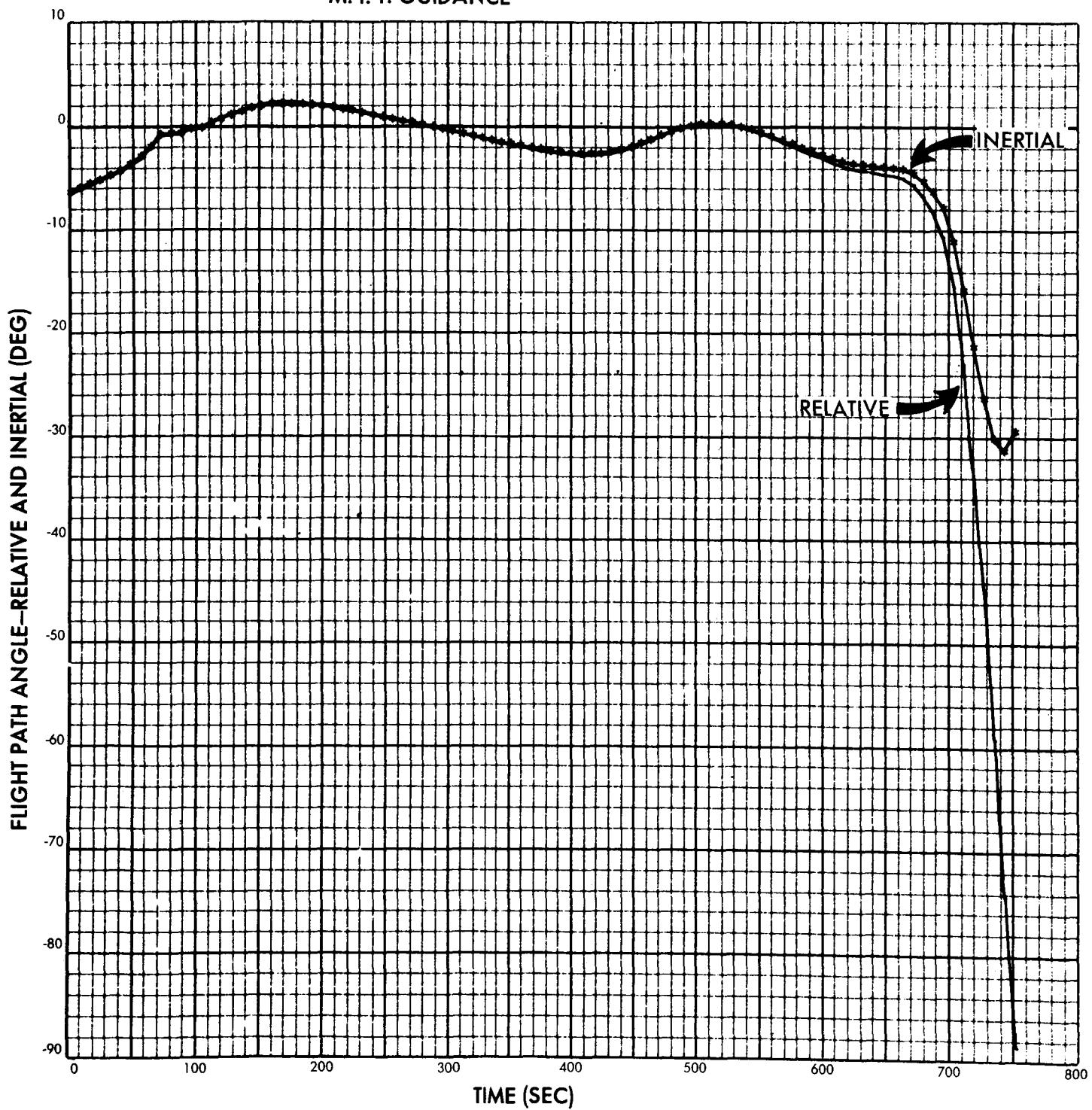


FIGURE 3 INERTIAL AND RELATIVE FLIGHT PATH ANGLE

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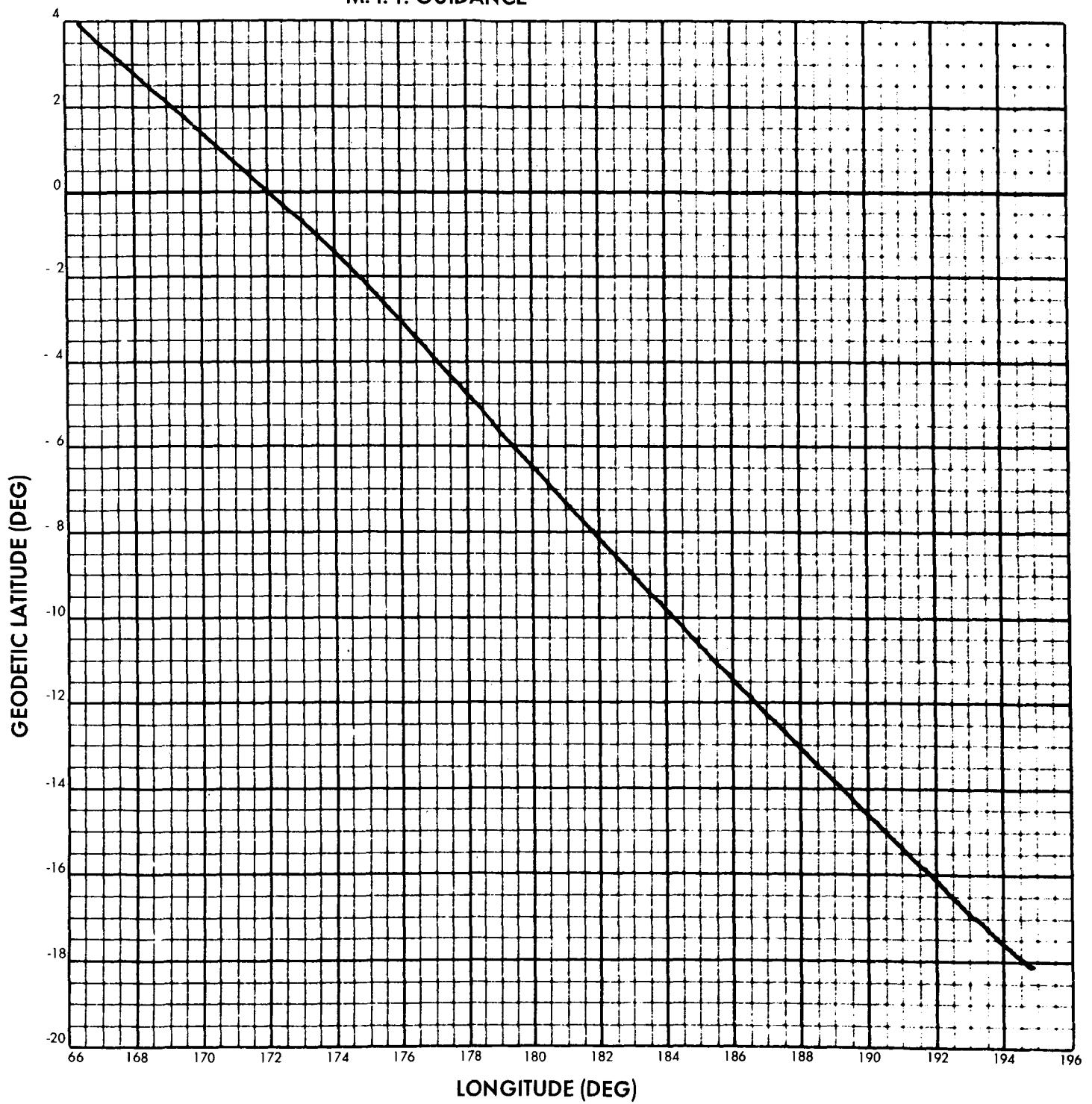


FIGURE 4 GEODETIC LATITUDE AND LONGITUDE

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6.

G-LOAD

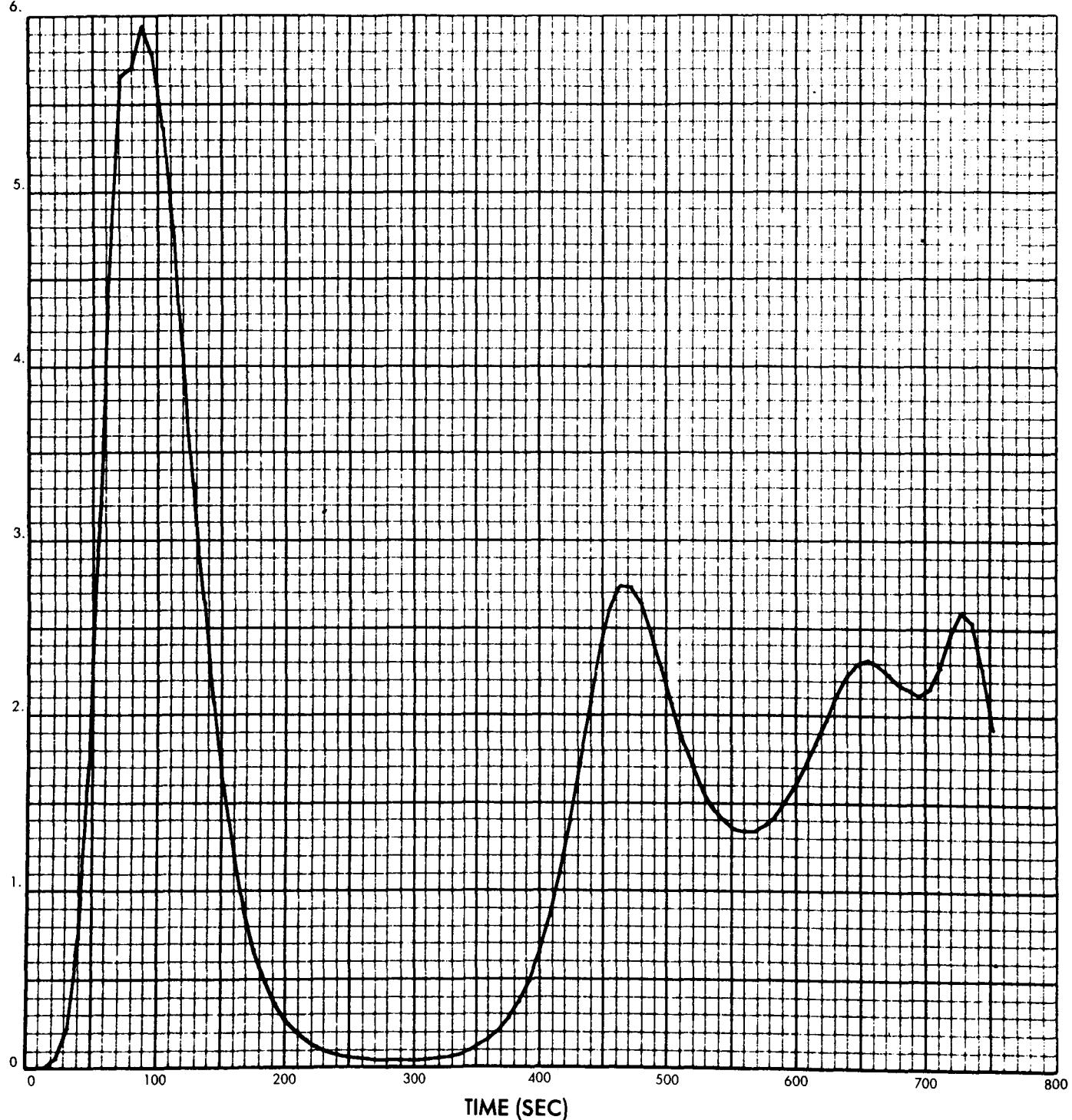


FIGURE 5 G-LOAD

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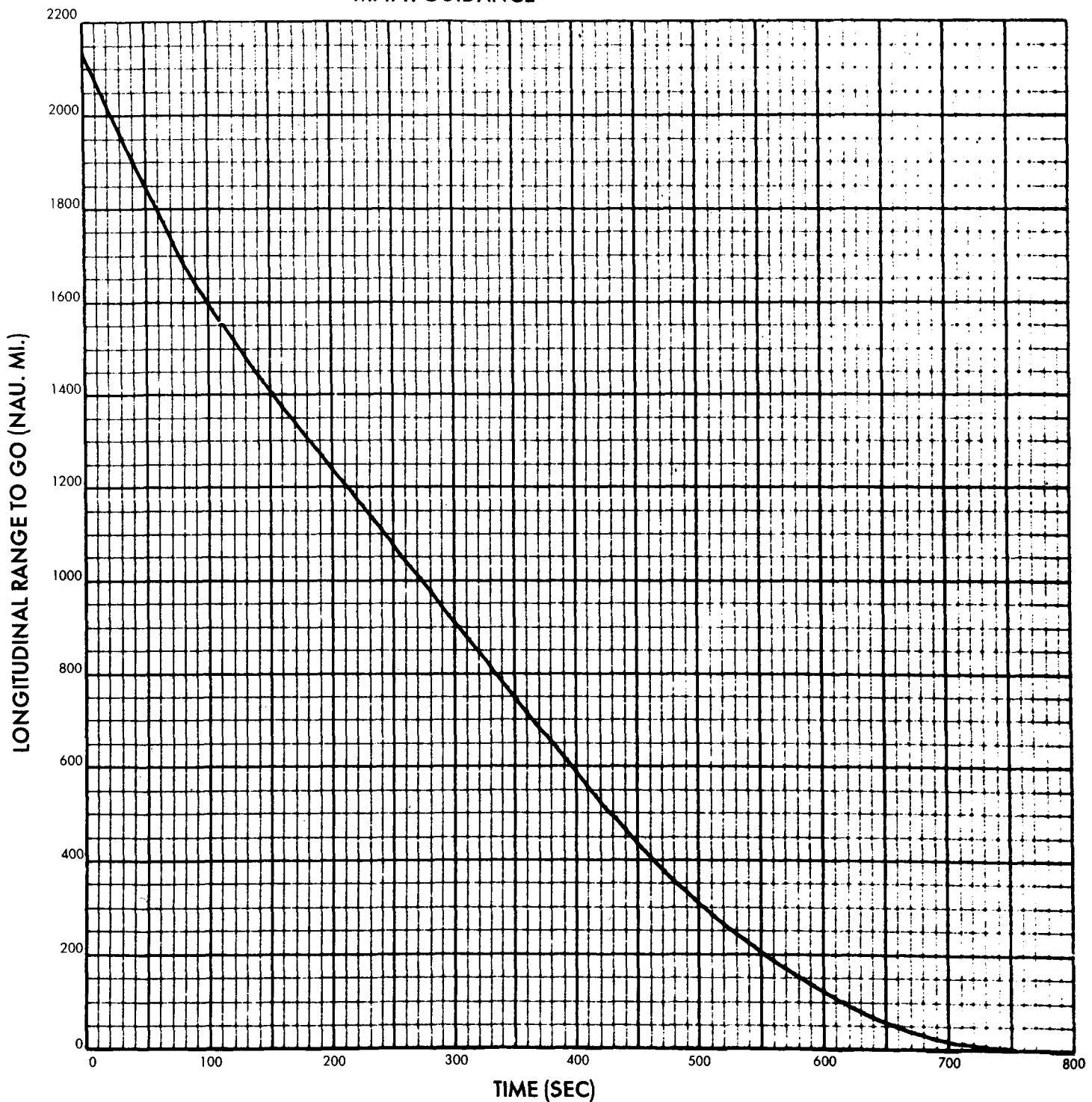


FIGURE 6 LONGITUDINAL RANGE TO GO

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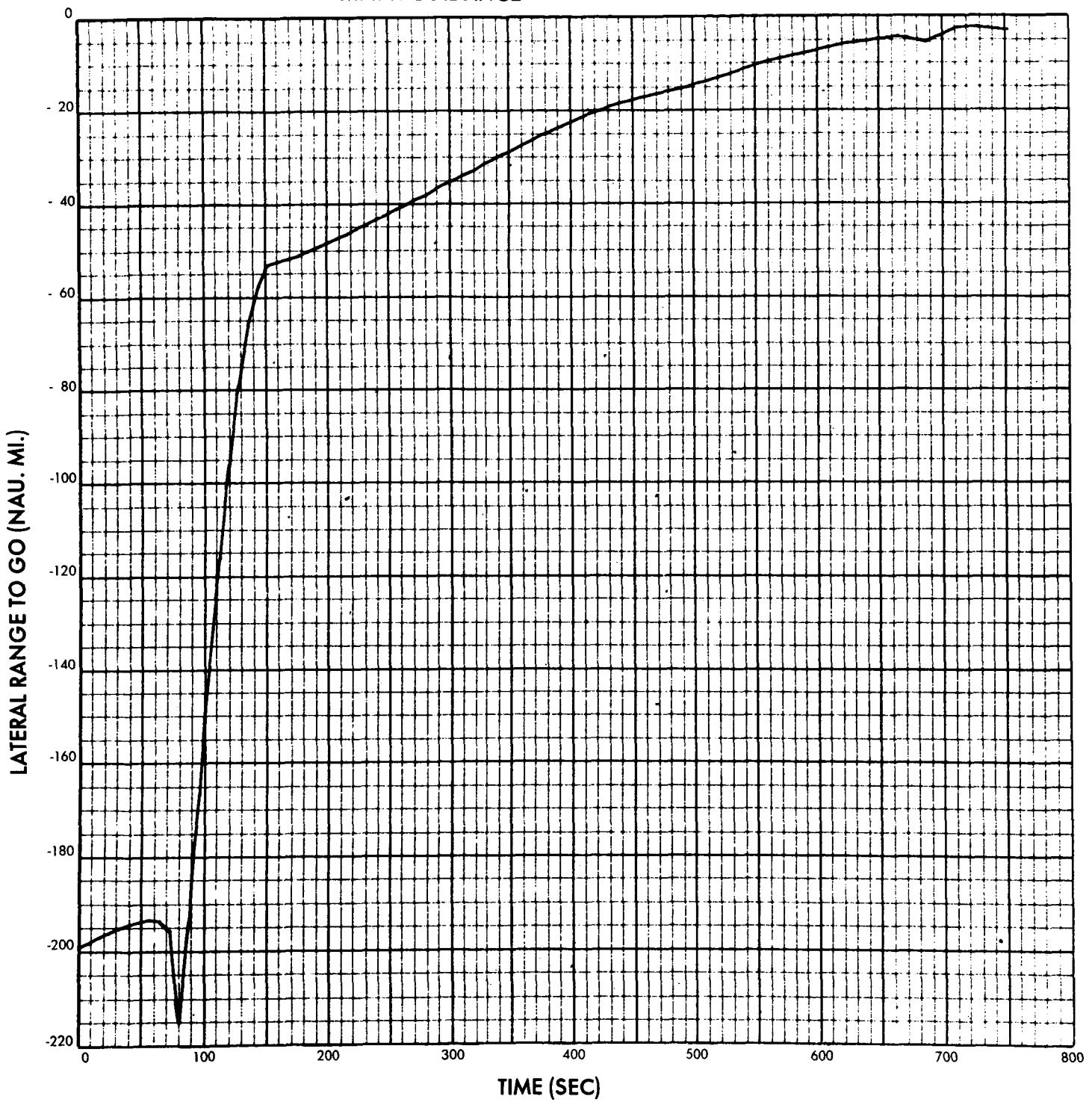


FIGURE 7 LATERAL RANGE TO GO

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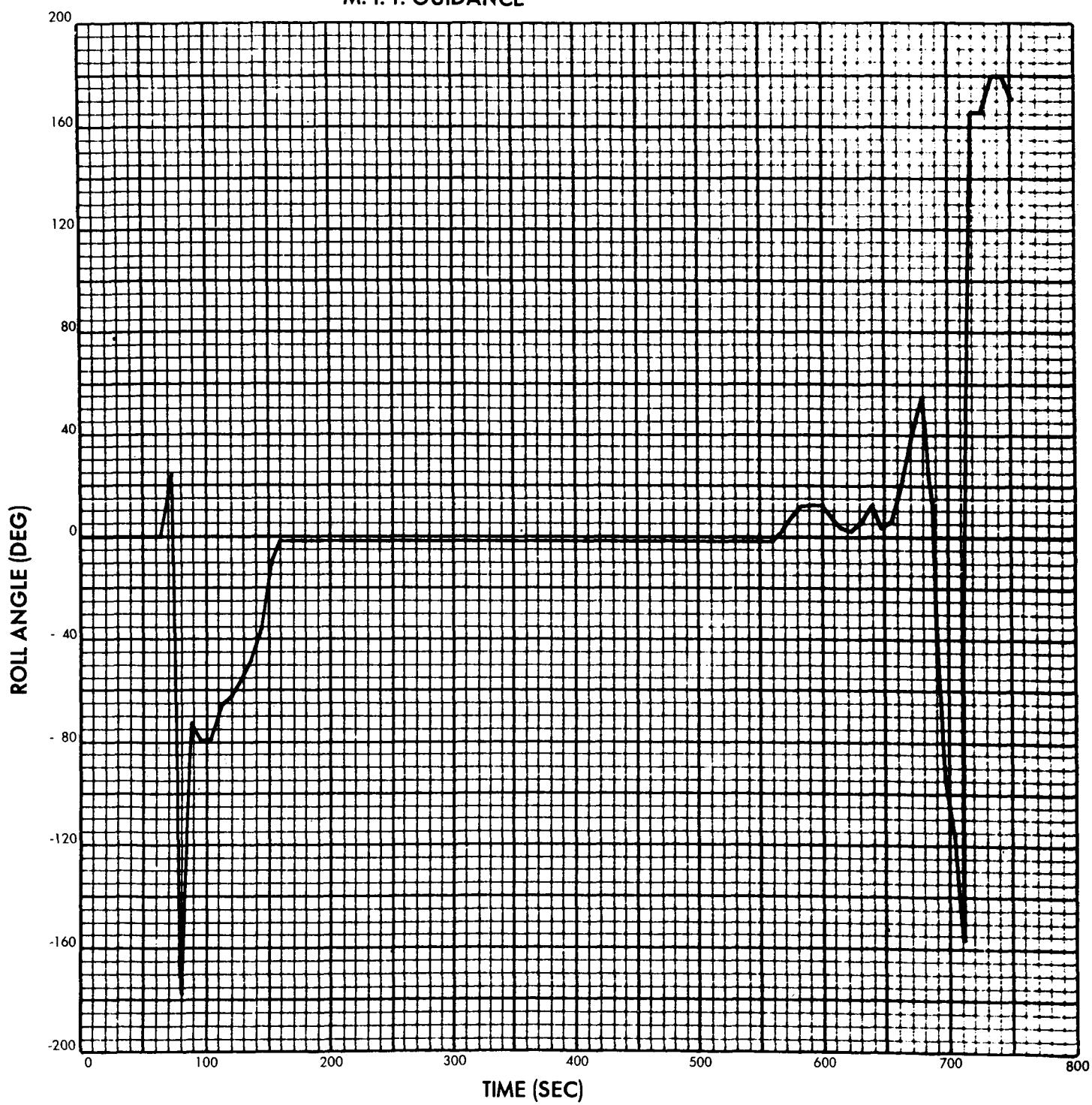


FIGURE 8 ROLL ATTITUDE

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HEADING ANGLE = 0.12322231E 03  
LATITUDE OF THE RE-ENTRY POINT = 0.411121262E 01  
LONGITUDE OF THE RE-ENTRY POINT = 0.16616534E 03  
LATITUDE OF THE LANDING SITE = -C.18188048E 02  
LONGITUDE OF THE LANDING SITE = -0.16508023E 03  
L/D MAXIMUM OF THE VEHICLE = C.40000000E-00

RMIN = 0.15CCCCCE 02 F0D = 0.30000000E-00 CK2L = 0.10000000E 01  
RL1 = 0.5CCCCCE 01 CLAT = 0.15000000E-01 CK3L = 0.10000000E 01  
RL2 = 0.2CCCCCE 02 C1 = 0.10CCCC00E 01 CK1P = 0.50000000E 00  
CR1 = C.11CCCCCE 02 CK5C = 0.86712392E 05 CK2P = 0.15000000E 01  
HMAX = 0.1CCCCCE 07 CtTA = 0.10CCCC00E 04 CK3P = 0.50000000E 00  
HMIN = 0.5CCCCCE 05 CP2 = 0.50000000E-01 CK3AP = 0.25000000E-00  
CTE = 0.5CCCCCE 01 C5 = 0. VWIN = 0.16000000E 05  
GMAX = 0.322000CE 03 C6 = 0. CK11P = 0.  
CWIN = C.1CCCCCE 01 C7 = 0.10000000E-04 CK12P = 0.  
CTPK = 0.1CCCCCE 01 CK13P = 0.20000000E 01  
VRTP = C.1CCCCCE 04 C9 = 0.  
VRCT = C.7CCCCCE 03 C10 = 0.  
C12 = C.93255255E 05 C13 = 0.30000000E 05 C23 = 0.15000000E 05  
C14 = C.1CCCCCE 03 RR = 0.21202900E 08 C16 = 0.10000000E-01  
C17 = 0.2CCCCCE-03 C18 = 0.10000000E 04 C19 = 0.13000000E 03  
C20 = C.175CCCCCE 03 C24 = 0.30000000E 02 C22 = 0.10000000E 01  
PS = 0.285CCCC0E 05 CK1L = 0.20000000E-00 FEND = 0.20000000E-00

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15 DEC. 1967 19 HR 20 MIN 24.73 SEC TMST 773753.2109 J.D. 2439840.3059 8 DAY 22 HR 55.9 MIN

X = -0.21271208E 08 XC = 0.26223536E 04 ALT = 0.399999950E 06 LAT = 0.41121263E 01 VI = 0.3606266E 05

Y = -0.93918125E C4 YC = -0.29979239E 05 R = 0.21325380E 08 LONG = 0.16616534E 03 FPAI = -0.63969869E 01

Z = 0.1519C284E C7 ZC = -0.19871626E 05 ROOT = -C.40179778E 04 FLP = 0. PSIV = 0.12322231E 03

XL = -0.17435500E 08 TAG = 0.1C0C0C00E 01 GLOAD = 0. FLY = 0.14591866E 01 VA = 0.34783797E 05

YL = -0.95774369E C7 RCLL = 0. ACC = 0. RTGN = -0.19945615E 03 FPAA = -0.66332090E 01

ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.36479567E 01 RTGL = 0.21510187E 04 PSAV = 0.12463174E 03

15 DEC. 1967 19 HR 20 MIN 29.85 SEC TMST 773758.3281 J.D. 2439840.3059 8 DAY 22 HR 56.0 MIN

X = -0.21257362E 08 XC = 0.27809556E 04 ALT = 0.37974575E 06 LAT = 0.38395802E 01 VI = 0.36079931E 05

Y = -0.163C34C0E 06 YC = -0.29970519E 05 R = 0.21305172E 08 LONG = 0.16655805E 03 FPAI = -0.6150653E 01

Z = 0.14171580E C7 ZC = -0.19882558E 05 ROOT = -0.38678515E 04 FLP = 0. PSIV = 0.12325088E 03

XL = -0.17432319E 08 TAG = 0.1C0C0000E 01 GLOAD = 0.79119939E-03 FLC = 0.32737691E 01 VA = 0.34801698E 05

YL = -0.95835524E C7 RCLL = 0. ACC = 0.21044656E 02 RTGN = -0.19883191E 03 FPAA = -0.63810205E 01

ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.81844229E 01 RTGL = 0.21224325E 04 PSAV = 0.12465907E 03

15 DEC. 1967 19 HR 20 MIN 34.98 SEC TMST 773763.4531 J.D. 2439840.3059 8 DAY 22 HR 56.1 MIN

X = -0.212427C2E 08 XC = 0.29398337E 04 ALT = 0.36026625E 06 LAT = 0.35663406E 01 VI = 0.360964466E 05

Y = -0.31666549E 06 YC = -0.29976548E 05 R = 0.21285735E 08 LONG = 0.16695127E 03 FPAI = -0.59106109E 01

Z = 0.13152236E C7 ZC = -0.19892682E 05 ROOT = -0.37170967E 04 FLP = 0. PSIV = 0.12327751E 03

XL = -0.17428737E 08 TAG = 0.100C0000E 01 GLOAD = 0.21154793E-02 FLC = 0.79263425E 01 VA = 0.34818806E 05

YL = -0.959C4665E C7 RCLL = 0. ACC = 0.31082137E 02 RTGN = -0.19820808E 03 FPAA = -0.61283137E 01

ZL = -0.64921529E 07 RLCT = 0. DRAG = 0.19815857E 02 RTGL = 0.20937912E 04 PSAV = 0.12468448E 03

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15 DEC. 1967 19 HR 20 MIN 39.98 SEC TWSI 773768.4531 J.D. 24398840.3060 8 DAY 22 HR 56.2 MIN

X = -0.21227615E 08 X0 = 0.30949895E .04 ALT = 0.34201100E 06 LAT = 0.32991056E 01 VI = 0.36111664E 05  
Y = -0.46654464E C6 YC = -0.29973270E 05 R = 0.21267519E 08 LONG = 0.16733538E 03 FPAI = -0.56724797E 01  
Z = 0.12157473E C7 ZC = -0.19901669E 05 ROOT = -0.35693416E 04 FLP = 0. PSIV = 0.12330162E 03  
XL = -0.17425238E C8 TAG = 0.10000000E 01 GLOAD = 0.52444816E-02 FLU = 0.18898344E 02 VA = 0.34834540E 05  
YL = -0.95968214E C7 RCLL = 0. ACC = 0.31090798E 02 RTGN = -0.19760003E 03 FPAA = -0.58811668E 01  
ZL = -0.64921529E C7 DRAG = 0.47245860E 02 RTGL = 0.20657976E 04 PSAV = 0.12470740E 03

15 DEC. 1967 19 HR 20 MIN 45.10 SEC TWSI 773773.5781 J.D. 24398840.3060 8 DAY 22 HR 56.2 MIN

X = -0.21211346E 08 XC = 0.32539138E 04 ALT = 0.32407175E 06 LAT = 0.30245575E 01 VI = 0.36125785E 05  
Y = -0.62214541E C6 YC = -C.29968132E 05 R = 0.21249616E 08 LONG = 0.16772956E 03 FPAI = -0.54274740E 01  
Z = C.111373C1E C7 ZC = -0.19909681E 05 ROOT = -0.34169821E 04 FLP = 0. PSIV = 0.12332438E 03  
XL = -0.17421650E 08 TAG = 0.10000000E 01 GLOAD = 0.13660027E-01 FLY = 0.48291352E 02 VA = 0.34849186E 05  
YL = -0.96022230E C7 RCLL = 0. ACC = 0.31024972E C2 RTGN = -0.19697809E 03 FPAA = -0.56269232E 01  
ZL = -C.64921529E 07 RLCT = 0. DRAG = 0.120712838E 03 RTGL = 0.20370542E 04 PSAV = 0.12472897E 03

15 DEC. 1967 19 HR 20 MIN 50.10 SEC TWSI 773778.5781 J.D. 24398840.3062 8 DAY 22 HR 56.3 MIN

X = -0.21194891E 08 XC = 0.34082110E 04 ALT = 0.30732850E 06 LAT = 0.27561298E 01 VI = 0.36136881E 05  
Y = -C.76996823E C6 YC = -0.29960420E 05 R = 0.212329C6E 08 LONG = 0.16811456E 03 FPAI = -0.51867909E 01  
Z = 0.1C141458E C7 ZC = -0.19915611E 05 ROOT = -0.32668819E 04 FLP = 0. PSIV = 0.12334461E 03  
XL = -0.17418147E C8 TAG = C.10000000E 01 GLOAD = 0.34661860E-01 FLY = 0.12247615E 03 VA = 0.34860769E 05  
YL = -0.96C96852E C7 RCLL = 0. ACC = 0.30788447E 02 RTGN = -0.19637388E 03 FPAA = -0.53772072E 01  
ZL = -0.64921529E C7 RLCT = 0. CRAG = 0.30619038E 03 RTGL = 0.20089660E 04 PSAV = 0.12474813E 03

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15 DEC. 1967 19 HR - 20 MIN 55.10 SEC TWST 773783.5781 J.D. 2439840.3062 8 DAY 22 HR 56.4 MIN

X = -0.21177268E 08 XC = 0.356C1188E 04 ALT = 0.29134525E 06 LAT = 0.24871902E 01 VI = 0.36142082E 05  
Y = -0.91974116E 06 YC = -0.29947548E 05 R = 0.21216952E 08 LONG = 0.16849996E 03 FPAI = -0.49424836E 01  
Z = C.91458CC4E C6 ZC = -0.19917831E 05 RDOT = -0.31138452E 04 FLP = 0. PSIV = 0.12336278E 03  
XL = -C.17414643E 08 TAG = 0.100C0000E 01 GLOAD = 0.88566987E-01 FLY = 0.31184538E 03 VA = 0.34866423E 05  
YL = -C.5616C342E C7 RCLL = 0. ACC = 0.30161125E 02 RTGN = -0.19577664E 03 FPAA = -0.51237884E 01  
ZL = -C.64921529E C7 RLDCCT = 0. DRAG = 0.77961346E 03 RTGL = 0.19808366E 04 PSAV = 0.12476541E 03

16 DEC. 1967 19 HR 21 MIN 0.23 SEC TWST 773788.7031 J.D. 2439840.3063 8 DAY 22 HR 56.5 MIN

X = -0.21158635E 08 XC = 0.37095809E 04 ALT = 0.27577373E 06 LAT = 0.22110950E 01 VI = 0.36133878E 05  
Y = -0.1073169E C7 YC = -0.2922336E 05 R = 0.21201408E 08 LONG = 0.16889527E 03 FPAI = -0.46837732E 01  
Z = C.81251111E 06 ZC = -0.19912060E 05 RDOT = -0.29505568E 04 FLP = 0. PSIV = 0.12337896E 03  
XL = -0.17411C48E 08 TAG = 0.100C0CC0E 01 GLOAD = 0.21206346E-00 FLY = 0.74506935E 03 VA = 0.34858644E 05  
YL = -0.96225419E C7 RCLL = 0. ACC = 0.28993422E 02 RTGN = -0.19518001E 03 FPAA = -0.48555225E 01  
ZL = -0.64921529E C7 RLDCCT = 0. DRAG = 0.18626734E 04 RTGL = 0.19519697E 04 PSAV = 0.12476118E 03

15 DEC. 1967 19 HR 21 MIN 5.23 SEC TWST 773793.7031 J.D. 2439840.3063 8 DAY 22 HR 56.6 MIN

X = -0.21139749E 08 XC = 0.38416507E 04 ALT = 0.26142100E 06 LAT = 0.19414908E 01 VI = 0.36097663E 05  
Y = -0.12226817E C7 YC = -0.29877533E 05 R = 0.21187079E 08 LONG = 0.16928101E 03 FPAI = -0.44140968E 01  
Z = 0.71299636E C6 ZD = -0.1989C099E 05 RDOT = -0.27782327E 04 FLP = 0. PSIV = 0.12339179E 03  
XL = -C.174C7538E C8 TAG = C.100CCCCCE 01 GLOAD = 0.47169113E-00 FLY = 0.16524081E 04 VA = 0.34822780E 05  
YL = -0.962885C2E C7 RCLL = 0. ACC = 0.28147584E 02 RTGN = -0.19463098E 03 FPAA = -0.45760372E 01  
ZL = -0.64921529E C7 RLDCCT = 0. DRAG = 0.41310204E 04 RTGL = 0.19237892E 04 PSAV = 0.12479466E 03

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15 DEC. 1967 19 HR 21 MIN 10.23 SEC TMSI 773798.7031 J.D. 24398840.3064 8 DAY 22 HR 56.7 MIN

X = -0.2112C261E 08 XC = 0.39485157E 04 ALT = 0.24798475E 06 LAT = 0.16719721E 01 VI = 0.36010946E 05

Y = -0.13718772E 07 YC = -0.29792642E 05 R = 0.21173664E 08 LONG = 0.16966639E 03 FPAI = -0.41136333E 01

Z = 0.6136518E C6 RCCT = -0.19839253E 05 RDCT = -0.25832373E 04 FLP = 0. PSIV = 0.12340082E 03

XL = -0.174C4C27E 08 TAG = 0.1000000CE 01 GLOAD = 0.88816123E 00 FLY = 0.31026889E 04 VA = 0.34736322E 05

YL = -0.96352255E 07 RCLL = 0. ACC = 0.31575001E 02 RTGN = -0.19414137E 03 FPAA = -0.422648546E 01

ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.77567724E 04 RTGL = 0.18956208E 04 PSAV = 0.12480623E 03

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15 DEC. 1967 19 HR 21 MIN 15.23 SEC TMSI 773803.7031 J.D. 24398840.3064 8 DAY 22 HR 56.7 MIN

X = -0.211CC329E 08 XC = 0.40162254E 04 ALT = 0.23560650E 06 LAT = 0.14030512E 01 VI = 0.35846691E 05

Y = -0.15205C91E 07 YC = -0.29648216E 05 R = 0.21161303E 08 LONG = 0.17005071E 03 FPAI = -0.37661321E 01

Z = 0.51461718E C6 ZC = -0.19744328E 05 RDOT = -0.23545570E 04 FLP = 0. PSIV = 0.12340496E 03

XL = -0.C.174CC512E 08 TAG = 0.1000000CE 01 GLOAD = 0.15135448E 01 FLY = 0.52898506E 04 VA = 0.345722205E 05

YL = -0.96415814E C7 RCLL = 0. ACC = 0.44275611E 02 RTGN = -0.19374244E 03 FPAA = -0.39051794E 01

ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.13224627E 05 RTGL = 0.18675143E 04 PSAV = 0.12481593E 03

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15 DEC. 1967 19 HR 21 MIN 20.23 SEC TMSI 773808.7031 J.D. 24398840.3065 8 DAY 22 HR 56.8 MIN

X = -0.21C8C192E 08 XC = 0.40283191E 04 ALT = 0.22448425E 06 LAT = 0.11354762E 01 VI = 0.35572803E 05

Y = -0.16682194E 07 YC = -0.29419981E 05 R = 0.21150195E 08 LONG = 0.17043293E 03 FPAI = -0.33521765E 01

Z = 0.41631860E C6 ZC = -0.19587284E 05 RDOT = -0.20800537E 04 FLP = 0. PSIV = 0.12340288E 03

XL = -0.17396596E 08 TAG = 0.1000000CE 01 GLOAD = 0.23573121E 01 FLY = 0.82177189E 04 VA = 0.34298304E 05

YL = -0.9647524CE C7 RCLL = 0. ACC = 0.67180955E 02 RTGN = -0.19347354E 03 FPAA = -0.34768907E 01

ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.20544298E 05 RTGL = 0.18395416E 04 PSAV = 0.12482375E 03

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15 DEC. 1967 19 HR 21 MIN 25.23 SEC T<sub>MST</sub> 773813.7031 J.D. 2439840.3065 8 DAY 22 HR 56.9 MIN

X = -C.2106C162E 08 XC = 0.397C9602E 04 ALT = 0.21487125E 06 LAT = 0.87024077E 00 VI = 0.35161617E 05  
Y = -0.18165336E 07 YC = -0.29086940E 05 R = 0.21140593E 08 LONG = 0.17081168E 03 FPAI = -0.28548235E 01  
Z = 0.31893431E 06 ZC = -0.19352538E 05 RDOT = -0.17512404E 04 FLP = 0. PSIV = 0.12339325E 03  
XL = -0.17393476E 08 TAG = 0.10CCCC00E 01 GLC0AD = 0.33490999E 01 FLY = 0.116677833E 05 VA = 0.33886944E 05  
YL = -0.96542674E 07 ACC = 0.96772303E 02 RTGN = -0.193371107E 03 FPAA = -0.29623025E 01  
ZL = -0.64921529E 07 RLCT = 0. DRAG = 0.29169583E 05 RTGL = 0.18118020E 04 PSAV = 0.12482974E 03

15 DEC. 1967 19 HR 21 MIN 30.23 SEC T<sub>MST</sub> 773818.7031 J.D. 2439840.3066 8 DAY 22 HR 57.0 MIN

X = -0.2104C6C7E 08 XC = 0.38390050E 04 ALT = 0.20704350E 06 LAT = 0.60851204E 00 VI = 0.34601157E 05  
Y = -0.19588973E 07 YC = -0.28639793E 05 R = 0.211327714E 08 LONG = 0.17118533E 03 FPAI = -0.22663490E 01  
Z = 0.22293514E 06 ZC = -0.19033244E 05 RDOT = -0.136830C6E 04 FLP = 0. PSIV = 0.12337518E 03  
XL = -0.17385552E 08 TAG = 0.1CC00000E 01 GLOAD = 0.43406129E 01 FLY = 0.15097813E 05 VA = 0.33326167E 05  
YL = -0.96606674E 07 RLCL = 0. ACC = 0.12740990E 03 RTGN = -0.19345847E 03 FPAA = -0.23531017E 01  
ZL = -0.64921529E 07 RLCT = 0. DRAG = 0.37744533E 05 RTGL = 0.17844124E 04 PSAV = 0.12483397E 03

15 DEC. 1967 19 HR 21 MIN 35.35 SEC T<sub>MST</sub> 773823.8281 J.D. 2439840.3066 8 DAY 22 HR 57.1 MIN

X = -0.21021428E 08 XC = 0.36353615E 04 ALT = 0.20112775E 06 LAT = 0.34511147E-00 VI = 0.33886070E 05  
Y = -0.21042677E 07 YC = -0.28073461E 05 R = 0.21126863E 08 LONG = 0.17156129E 03 FPAI = -0.15769190E 01  
Z = 0.1264C160E 06 ZC = -0.18626076E 05 RDOT = -0.93250924E 03 FLP = 0. PSIV = 0.12334787E 03  
XL = -0.17386244E 08 TAG = 0.20000000E 01 GLOAD = 0.51735826E 01 FLY = 0.17959870E 05 VA = 0.32610665E 05  
YL = -0.96671657E 07 RLCL = 0. ACC = 0.15361038E 03 RTGN = -0.19374224E 03 FPAA = -0.16386076E 01  
ZL = -0.64921529E 07 RLCT = 0. DRAG = 0.44899676E 05 RTGL = 0.17568283E 04 PSAV = 0.12483659E 03

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REFERENCE TRAJECTORY CALCULATION BEGAN AT

0.73624998E C2SECONDS

C <sub>0</sub>	=	0.16178463E C3	ALTITUDE	=	0.19872675E 06	VELOCITY	=	0.33417119E 05
C <sub>1</sub>	=	C.27C43117E C5	VL	=	0.21615595E 05	R00TL	=	0.10855042E 04
V1	=	C.87581771E-C1	ASKEP	=	0.23580328E-00	ASP3	=	-0.22264759E-01
ASUP	=	C.18249532E-CC	ASP	=	0.53978755E 00	ASPD	=	0.56171954E-01
ASPI	=	C.15161641E C4	CLG	=	0.44335779E 04	FACT2	=	-0.36513116E-03
CLV	=	C.16178463E 03	ALP	=	0.63047612E-01	FACT1	=	0.28862851E 05
DG	=							

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15 DEC. 1967 19 HR 21 MIN 40.35 SEC TMST 773828.8281 J.D. 2439840.3068 8 DAY 22 HR 57.2 MIN

X = -0.21CC3846E 08 XC = 0.33945094E 04 ALT = 0.19757125E 06 LAT = 0.93925502E-01 VI = 0.33091061E 05

Y = -0.2243CS31E 07 YC = -0.27454563E 05 R = 0.21123309E 08 LONG = 0.17191983E 03 FPAI = -0.84754365E 00

Z = 0.34395829E 05 ZC = -0.18158817E 05 ROOT = -0.48947926E 03 FLP = 0.58489565E 04 PSIV = 0.12328401E 03

XL = -0.17382818E 08 TAG = 0.300CCC00E 01 GLOAD = 0.56386830E 01 FLW = 0.18645036E 05 VA = 0.31814781E 05

YL = -0.96734451E C7 RCLL = 0.17416666E 02 ACC = 0.169006644E 03 RTGN = -0.19503631E 03 FPAA = -0.88154519E 00

ZL = -0.64921529E C7 RLDCCT = 0.16500000E 02 DRAG = 0.488852307E 05 RTGL = 0.17304142E 04 PSAV = 0.12480672E 03

15 DEC. 1967 19 HR 21 MIN 45.35 SEC TMST 773833.8281 J.D. 2439840.3068 8 DAY 22 HR 57.2 MIN

X = -0.20987165E 08 XC = 0.33600714E 04 ALT = 0.19590600E 06 LAT = -0.14950389E-00 VI = 0.32265970E 05

Y = -0.2379CC71E C7 YC = -0.26290821E CS R = 0.21121641E 08 LONG = 0.17227036E 03 FPAI = -0.46387827E-00

Z = -0.54744421E C5 ZC = -0.17466316E 05 ROOT = -0.26122899E 03 FLP = 0.178A9797E 05 PSIV = 0.12277651E 03

XL = -0.17379290E 08 TAG = 0.30000000E 01 GLOAD = 0.56686623E 01 FLY = -0.82157788E 04 VA = 0.30982247E 05

YL = -0.96797E14E C7 RGLL = 0.11466666E 03 ACC = 0.18652287E 03 RTGN = -0.20900028E 03 FPAA = -0.48309842E-00

ZL = -0.64921529E 07 RLDCCT = 0.20000000E 02 DRAG = 0.49215335E 05 RTGL = 0.17032798E 04 PSAV = 0.12431874E 03

15 DEC. 1967 19 HR 21 MIN 50.35 SEC TMST 773838.8281 J.D. 2439840.3069 8 DAY 22 HR 57.3 MIN

X = -0.2C969527E 08 XC = 0.37115219E 04 ALT = 0.19418375E 06 LAT = -0.383888130E-00 VI = 0.31433025E 05

Y = -0.2512CC26E C7 YC = -0.26223697E 05 R = 0.21119919E 08 LONG = 0.17261337E 03 FPAI = -0.82647252E 00

Z = -0.14055515E 06 ZC = -0.16928597E 05 ROOT = -0.45339519E 03 FLP = -0.11334464E 05 PSIV = 0.12259687E 03

XL = -0.1737576CE C8 TAG = 0.30000000E 01 GLOAD = 0.57499632E 01 FLW = -0.16389415E 05 VA = 0.30147117E 05

YL = -0.96861182E C7 RCLL = -0.14513335E 03 ACC = 0.19361496E 03 RTGN = -0.21347877E 03 FPAA = -0.86172739E 00

ZL = -0.64921529E C7 RLDCCT = 0.20000000E 02 DRAG = 0.49817355E 05 RTGL = 0.16778149E 04 PSAV = 0.12417406E 03

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15 DEC. 1967 19 HR 21 MIN 55.35 SEC TMST 773843.8281 J.D. 2439840.3069 8 DAY 22 HR 57.4 MIN

X	= -0.2C95C513E 08	XD	= 0.37934983E 04	ALT	= 0.19182600E 06	LAT	= -0.61347046E 00	VI	= 0.30569657E 05
Y	= -0.26408798E 07	YC	= -0.25323964E 05	R	= 0.21117556E 08	LONG	= 0.17294581E 03	FPAI	= -0.78536674E 00
Z	= -0.22458580E 06	ZC	= -0.16697610E 05	RDOT	= -0.41901236E 03	FLP	= -0.19548972E 05	PSIV	= 0.12312334E 03
XL	= -0.17372227E C8	TAG	= 0.30000000E 01	GLOAD	= 0.59138937E 01	FLY	= 0.61637620E 04	VA	= 0.29292270E 05
YL	= -0.96924517E C7	RCLL	= -0.72500015E 02	ACC	= 0.18569106E 03	RTGN	= -0.19808364E 03	FPAA	= -0.81961671E 00
ZL	= -0.64921529E C7	RLECT	= 0.	DRAG	= 0.51244164E 05	RTGL	= 0.16552997E 04	PSAV	= 0.12476957E 03

15 DEC. 1967 19 HR 22 MIN 0.35 SEC TMST 773848.8281 J.D. 2439840.3070 8 DAY 22 HR 57.5 MIN

X	= -0.20931794E 08	XD	= 0.37175802E 04	ALT	= 0.19017450E 06	LAT	= -0.84004699E 00	VI	= 0.29689313E 05
Y	= -0.27652445E C7	YC	= -0.24421825E 05	R	= 0.21115898E 08	LONG	= 0.17326613E 03	FPAI	= -0.47702894E-00
Z	= -0.3075C974E C6	ZC	= -0.16468434E 05	RDOT	= -0.24718222E 03	FLP	= -0.19608952E 05	PSIV	= 0.12370325E 03
XL	= -0.173686792E 08	TAG	= 0.30000000E 01	GLOAD	= 0.59366833E 01	FLY	= 0.61826736E 04	VA	= 0.28421348E 05
YL	= -0.96987060E C7	RCLL	= -0.725C0015E 02	ACC	= 0.18660251E 03	RTGN	= -0.18134407E 03	FPAA	= -0.49831096E-00
ZL	= -0.64921929E 07	RLECT	= 0.	DRAG	= 0.51401392E 05	RTGL	= 0.16335210E 04	PSAV	= 0.12542585E 03

15 DEC. 1967 19 HR 22 MIN 5.35 SEC TMST 773853.8281 J.D. 2439840.3070 8 DAY 22 HR 57.6 MIN

X	= -0.2C913365E 08	XC	= 0.3662658CE 04	ALT	= 0.18931025E 06	LAT	= -0.10634566E 01	VI	= 0.28820203E 05
Y	= -0.28851147E C7	YC	= -0.23528689E 05	R	= 0.21115024E 08	LONG	= 0.17357431E 03	FPAI	= -0.22557382E-00
Z	= -0.38926746E 06	ZC	= -0.16235450E 05	RDOT	= -0.11346502E 03	FLP	= -0.19607200E 05	PSIV	= 0.12429877E 03
XL	= -0.17365154E 08	TAG	= 0.30000000E 01	GLOAD	= 0.57662483E 01	FLY	= 0.37258017E 04	VA	= 0.27562096E 05
YL	= -0.97051191E C7	RCLL	= -0.79240810E 02	ACC	= 0.18277854E 03	RTGN	= -0.16433308E 03	FPAA	= -0.23586948E-00
ZL	= -0.64921529E C7	RLECT	= -0.41224118E 01	DRAG	= 0.49895134E 05	RTGL	= 0.16123450E 04	PSAV	= 0.12610245E 03

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15 DEC. 1967 19 HR 22 MIN 10.35 SEC TMST 773858.8281 J.D. 2439840.3071 8 DAY 22 HR 57.7 MIN

X = -0.20895C65E\_08 XC = 0.36681448E\_04 ALT = 0.18893500E\_06 LAT = -0.12837189E\_01 VI = 0.27983831E\_05  
Y = -0.300C57C7E\_07 YC = -0.22658929E\_05 R = 0.21114638E\_08 LONG = 0.17387064E\_03 FPAI = -0.11011289E-00  
Z = -0.46987179E\_06 ZC = -0.16066638E\_05 RDOT = -0.53780238E\_02 FLP = -0.19015277E\_05 PSIV = 0.12490248E\_03  
XL = -0.17361615E\_08 TAG = 0.30000000E\_01 GLOAD = 0.55002550E\_01 FLY = -0.83394495E\_03 VA = 0.26735905E\_05  
YL = -0.97114489E\_07 RCLL = -0.92511189E\_02 ACC = 0.17713599E\_03 RTGN = -0.14725393E\_03 FPAA = -0.11525090E-00  
ZL = -0.64921529E\_07 RLDCCT = 0.11041961E\_01 DRAG = 0.47583888E\_05 RTGL = 0.15917240E\_04 PSAV = 0.12679035E\_03

15 DEC. 1967 19 HR 22 MIN 15.35 SEC TMST 773863.8281 J.D. 2439840.3071 8 DAY 22 HR 57.7 MIN

X = -0.20876726E\_08 XC = 0.36387201E\_04 ALT = 0.18882350E\_06 LAT = -0.15008496E\_01 VI = 0.27188827E\_05  
Y = -0.31117527E\_07 YC = -0.21845869E\_05 R = 0.21114514E\_08 LONG = 0.17415568E\_03 FPAI = 0.67764013E-01  
Z = -0.54932737E\_C6 ZC = -0.15771811E\_05 RDOT = 0.32156365E\_02 FLP = -0.16411644E\_05 PSIV = 0.12546815E\_03  
XL = -0.17358C72E\_08 TAG = 0.30000000E\_01 GLOAD = 0.52042271E\_01 FLY = 0.74004583E\_04 VA = 0.25950639E\_05  
YL = -0.97117792E\_07 RCLL = -0.65728088E\_02 ACC = 0.16282144E\_03 RTGN = -0.13135667E\_03 FPAA = 0.70997254E-01  
ZL = -0.64921529E\_07 RLDCCT = 0.450071558E\_05 DRAG = 0.450071558E\_05 RTGL = 0.15715273E\_04 PSAV = 0.12744041E\_03

15 DEC. 1967 19 HR 22 MIN 20.35 SEC TMST 773868.8281 J.D. 2439840.3071 8 DAY 22 HR 57.8 MIN

X = -0.20858737E\_C8 XC = 0.35596796E\_04 ALT = 0.18933400E\_06 LAT = -0.17146755E\_01 VI = 0.26443313E\_05  
Y = -0.321914C7E\_C7 YC = -0.21102715E\_C5 R = 0.21115010E\_08 LONG = 0.17443022E\_03 FPAI = 0.35195879E-00  
Z = -0.62758273E\_C6 ZC = -0.15532319E\_05 RDOT = 0.16243601E\_03 FLP = -0.15212992E\_05 PSIV = 0.12597766E\_03  
XL = -0.17354529E\_C8 TAG = 0.3C000000E\_01 GLOAD = 0.48269150E\_01 FLY = 0.68599535E\_04 VA = 0.25214083E\_05  
YL = -0.97241C64E\_C7 RCLL = -0.65728088E\_02 ACC = 0.15127612E\_03 RTGN = -0.11708333E\_03 FPAA = 0.36911879E-00  
ZL = -0.64921529E\_07 RLDCCT = 0.41720356E\_05 DRAG = 0.41720356E\_05 RTGL = 0.15517129E\_04 PSAV = 0.12803270E\_03

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15 DEC.	1967	19	HR	22 MIN	25.35 SEC	TNST	773873.8281	J.D.	2439840.3073	R	DAB	22 HR	57.9 MIN
X	= -0.20841098E 08	XC	= 0.34990095E 04	ALT	= 0.19044200E 06	LAT	= -0.19252629E 01	VI	= 0.25757866E 05				
Y	= -0.33229216E C7	YC	= -0.20420377E 05	R	= 0.21116101E 08	LONG	= 0.17469509E 03	FPAI	= 0.60221350E 00				
Z	= -0.7C467C37E C6	ZC	= -0.15304666E 05	ROOT	= 0.27072586E 03	FLP	= -0.13831071E 05	PSIV	= 0.12645473E 03				
XL	= -0.1735C581E 08	TAG	= 0.3C0COC0CE 01	GLOAD	= 0.43908124E 01	FLY	= 0.62368074E 04	VA	= 0.24537162E 05				
YL	= -0.973C4342E 07	RCLL	= -0.65728088E 02	ACC	= 0.13793495E 03	RTGN	= -0.10378474E 03	FPAIA	= 0.63217498E 00				
ZL	= -0.64921529E 07	RLCT	= 0.32654110E C1	DRAG	= 0.37930552E 05	RTGL	= 0.15323137E 04	PSAV	= 0.12859060E 03				

15 DEC.	1967	19	HR	22 MIN	30.35 SEC	TNST	773878.8281	J.D.	2439840.3073	R	DAB	22 HR	58.0 MIN
X	= -0.20823738E 08	XC	= 0.34478730E 04	ALT	= 0.19206675E 06	LAT	= -0.21327685E 01	VI	= 0.25139286E 05				
Y	= -0.34234674E C7	YC	= -0.19805709E 05	R	= 0.21117708E 08	LONG	= 0.17495120E 03	FPAI	= 0.84175251E 00				
Z	= -C.78C64737E C6	ZC	= -0.15088782E 05	ROOT	= 0.36931683E 03	FLP	= -0.12044818E 05	PSIV	= 0.12687986E 03				
XL	= -0.17347433E C8	TAG	= 0.30000000E 01	GLOAD	= 0.39228348E 01	FLY	= 0.62644696E 04	VA	= 0.23926317E 05				
YL	= -0.97367589E 07	RCLL	= -0.62462677E 02	ACC	= 0.12307548E 03	RTGN	= -0.91943235E 02	FPAIA	= 0.88443009E 00				
ZL	= -0.64921529E C7	RLCT	= 0.353C9106E 01	DRAG	= 0.33874717E 05	RTGL	= 0.15132694E 04	PSAV	= 0.12909225E 03				

15 DEC.	1967	19	HR	22 MIN	35.35 SEC	TNST	773883.8281	J.D.	2439840.3074	R	DAB	22 HR	58.1 MIN
X	= -0.208066C7E 08	XC	= 0.34066743E 04	ALT	= 0.19416300E 06	LAT	= -0.23373580E 01	VI	= 0.24588321E 05				
Y	= -0.35211413E C7	YC	= -0.19271398E C5	R	= 0.21119785E 08	LONG	= 0.17519954E 03	FPAI	= 0.10716089E 01				
Z	= -0.85557834E C6	ZC	= -0.14886012E 05	ROOT	= 0.45985109E 03	FLP	= -0.98898157E 04	PSIV	= 0.12724718E 03				
XL	= -0.17343881E C8	TAG	= 0.30000000E 01	GLOAD	= 0.34752877E 01	FLY	= 0.67903575E 04	VA	= 0.23382158E 05				
YL	= -0.9743C841E C7	RCLL	= -0.55526470E 02	ACC	= 0.10839146E 03	RTGN	= -0.81616551E 02	FPAIA	= 0.11268950E 01				
ZL	= -0.64921529E C7	RLCT	= 0.	DRAG	= 0.29991396E 05	RTGL	= 0.14945473E 04	PSAV	= 0.12953047E 03				

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15 DEC. 1967 19 HR 22 MIN 40.48 SEC TMST 773888.9531 J.D. 2439840.3074 8 DAY 22 HR 58.2 MIN

X = -0.2C789229E 08 XC = 0.33774902E 04 ALT = 0.19675925E 06 LAT = -0.25442251E 01 VI = 0.24092640E 05  
Y = -0.36186477E 07 YC = -0.18792224E 05 R = 0.21122360E 08 LCNG = 0.17544704E 03 FPAI = 0.12917237E 01  
Z = -0.93136869E C6 ZC = -0.14693542E 05 RDOT = 0.54311848E 03 FLP = -0.82353362E 04 PSIV = 0.12756279E 03  
XL = -0.17340239E C8 TAG = 0.300C000E 01 GLOAD = 0.30203595E 01 FLY = 0.63869167E 04 VA = 0.22892435E 05  
YL = -0.97495651E C7 RCLL = -0.52204628E 02 ACC = 0.94179CC9E 02 RTGN = -0.72775356E 02 FPAA = 0.13594595E 01  
ZL = -C.64921529E C7 RLDET = 0. DRAG = 0.2605447E 05 RTGL = 0.14756625E 04 PSAV = 0.12991196E 03

15 DEC. 1967 19 HR 22 MIN 45.48 SEC TMST 773893.9531 J.D. 2439840.3075 8 DAY 22 HR 58.2 MIN

X = -0.2C772383E 08 XC = 0.3630248E 04 ALT = 0.19967900E 06 LAT = -0.27434888E 01 VI = 0.23672475E 05  
Y = -0.37115777E C7 YC = -0.18390564E 05 R = 0.21125258E 08 LONG = 0.17568259E 03 FPAI = 0.14878594E 01  
Z = -0.1C043596E 07 ZC = -0.14521134E 05 RDOT = 0.61465881E 03 FLP = -0.67017861E 04 PSIV = 0.12781281E 03  
XL = -0.17336684E 08 TAG = 0.3000C00E 01 GLOAD = 0.26080842E 01 FLY = 0.59953200E 04 VA = 0.22477084E 05  
YL = -0.97558857E 07 RCLL = -0.48184654E 02 ACC = 0.81433081E 02 RTGN = -0.65601747E 02 FPAA = 0.15670067E 01  
ZL = -0.64921529E C7 RLDET = 0.34346631E 01 DRAG = 0.22480242E 05 RTGL = 0.14575084E 04 PSAV = 0.13021915E 03

15 DEC. 1967 19 HR 22 MIN 50.48 SEC TMST 773898.9531 J.D. 2439840.3075 8 DAY 22 HR 58.3 MIN

X = -0.2C755578E 08 XC = 0.33610161E 04 ALT = 0.20293925E 06 LAT = -0.29404181E 01 VI = 0.23310270E 05  
Y = -0.38026558E C7 YC = -0.18050103E 05 R = -0.21128494E 08 LONG = 0.17591317E 03 FPAI = 0.16685179E 01  
Z = -0.1C766C23E C7 ZC = -0.14361965E 05 RDOT = 0.67872546E 03 FLP = -0.50525087E 04 PSIV = 0.12800270E 03  
XL = -0.17333125E C8 TAG = 0.300C00CCE 01 GLOAD = 0.22420478E 01 FLY = 0.58468148E 04 VA = 0.22118633E 05  
YL = -0.97622C71E C7 RCLL = -0.40831848E 02 ACC = 0.69880652E 02 RTGN = -0.59959663E 02 FPAA = 0.17584373E 01  
ZL = -0.64921529E C7 RLDET = 0. DRAG = 0.19318561E 05 RTGL = 0.14395889E 04 PSAV = 0.13045870E 03

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15 DEC.	1967	19	HR	22 MIN	55.48 SEC	TWST	773903.9531	J.D.	2439840.3076	8 DAY	22 HR	58.4 MIN
X	= -0.2C73875CE.08	XC	= 0.33719288E.04	ALT	= 0.20650050E.06	LAT	= -0.31351850E.01	VI	= 0.22999649E.05			
Y	= -0.38921692E.07	YC	= -0.17764152E.05	R	= 0.21132030E.08	LONG	= 0.17613960E.03	FPAI	= 0.18310747E.01			
Z	= -0.1148039E.07	ZC	= -0.14214390E.05	RDOT	= 0.73490415E.03	FLP	= -0.35543130E.04	PSIV	= 0.12813505E.03			
XL	= -0.17325565E.08	TAG	= 0.30000000E.C1	GLOAD	= 0.19154089E.01	FLY	= 0.55602363E.04	VA	= 0.21810735E.05			
YL	= -0.97685261E.C7	RCLL	= -0.32588253E.02	ACC	= 0.59830323E.02	RTGN	= -0.55752742E.02	FPA	= 0.19309252E.01			
ZL	= -0.64921529E.C7	RLDOT	= 0.41910450E.01	DRAG	= 0.16497987E.05	RTGL	= 0.14218771E.04	PSAV	= 0.13063332E.03			

15 DEC.	1967	19	HR	23 MIN	0.48 SEC	TWST	773908.9531	J.D.	2439840.3076	8 DAY	22 HR	58.5 MIN
X	= -0.2C721838E.08	XC	= 0.33946019E.04	ALT	= 0.21032825E.06	LAT	= -0.33279138E.01	VI	= 0.22734787E.05			
Y	= -0.39803820E.C7	YC	= -C.17529639E.05	R	= 0.21135832E.08	LONG	= 0.17626260E.03	FPAI	= 0.19778384E.01			
Z	= -0.12187584E.C7	ZC	= -0.14073342E.05	RDOT	= 0.78464423E.03	FLP	= -0.15505594E.04	PSIV	= 0.12820151E.03			
XL	= -0.17326C02E.08	TAG	= C.30000000E.01	GLOAD	= 0.16251146E.01	FLY	= 0.53768913E.04	VA	= 0.21547408E.05			
YL	= -0.97748439E.C7	RCLL	= -0.16086227E.02	ACC	= 0.50843769E.02	RTGN	= -0.53149172E.02	FPA	= 0.20868755E.01			
ZL	= -0.64921529E.C7	RLDOT	= 0.94179431E.01	DRAG	= 0.13989996E.05	RTGL	= 0.14043384E.04	PSAV	= 0.13073428E.03			

15 DEC.	1967	19	HR	23 MIN	5.48 SEC	TWST	773913.9531	J.D.	2439840.3077	8 DAY	22 HR	58.6 MIN
X	= -0.2C704781E.08	XC	= 0.34315887E.04	ALT	= 0.21438875E.06	LAT	= -0.35186157E.01	VI	= 0.22511183E.05			
Y	= -0.4C675599E.C7	YC	= -0.17347674E.05	R	= 0.21139865E.08	LONG	= 0.17658292E.03	FPAI	= 0.21031493E.01			
Z	= -0.12887617E.C7	ZC	= -0.13929673E.05	RDOT	= 0.82612971E.03	FLP	= -0.15044060E.03	PSIV	= 0.12817875E.03			
XL	= -0.17322437E.C8	TAG	= 0.30000000E.01	GLOAD	= 0.13677318E.01	FLY	= 0.47046346E.04	VA	= 0.21323733E.05			
YL	= -0.97811594E.C7	RCLL	= -0.18315315E.01	ACC	= 0.44111518E.02	RTGN	= -0.52666943E.02	FPA	= 0.22203246E.01			
ZL	= -0.64921529E.C7	RLDOT	= 0.	CRAG	= 0.11767599E.05	RTGL	= 0.13869254E.04	PSAV	= 0.13073704E.03			

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15 DEC. 1967 19 HR 23 MIN 10.48 SEC TMST 773918.9531 J.D. 2439840.3077 8 DAY 22 HR 58.7 MIN

X = -C.2C687492E 08 XC = 0.34867264E 04 ALT = 0.21862075E 06 LAT = -0.37074072E 01 VI = 0.22322662E 05  
Y = -C.41539CC0E C7 YC = -0.17192039E 05 R = 0.21144068E 08 LONG = 0.17680113E 03 FPAI = 0.21892993E 01  
Z = -0.1358C899E C7 ZC = -0.13804991E 05 RDOT = 0.85275210E 03 FLP = -0.12569137E 03 PSIV = 0.12814845E 03  
XL = -0.17318869E 08 TAG = 0.300COCOGE 01 GLOAD = 0.11433541E 01 FLY = 0.39306677E 04 VA = 0.21134950E 05  
YL = -0.97874755E 07 RCLL = -0.18315315E 01 ACC = 0.39202240E 02 RTGN = -0.52344910E 02 FPAA = 0.23123955E 01  
ZL = -0.64921529E 07 RLDCT = 0. DRAG = 0.98316920E 04 RTGL = 0.13696788E 04 PSAV = 0.13072800E 03

15 DEC. 1967 19 HR 23 MIN 15.48 SEC TMST 773923.9531 J.D. 2439840.3079 8 DAY 22 HR 58.7 MIN

X = -0.2C669887E 08 XC = 0.35576031E 04 ALT = 0.22295375E 06 LAT = -0.38945715E 01 VI = 0.22164345E 05  
Y = -0.42395145E C7 YD = -0.17056884E 05 R = 0.21148311E 08 LONG = 0.17701758E 03 FPAI = 0.22403686E 01  
Z = -0.14268429E 07 ZD = -0.13699065E 05 RDOT = 0.86644515E 03 FLP = -0.10449446E 03 PSIV = 0.12811978E 03  
XL = -0.173153C0E 08 TAG = 0.360CCOC0E 01 GLCAD = 0.95105726E 00 FLY = 0.326777898E 04 VA = 0.20976350E 05  
YL = -0.97937882E 07 RCLL = -0.18315315E 01 ACC = 0.35558888E 02 RTGN = -0.51966114E 02 FPAA = 0.23673239E 01  
ZL = -0.64921529E 07 RLDCT = 0. DRAG = 0.81736505E 04 RTGL = 0.13525793E 04 PSAV = 0.13071727E 03

15 DEC. 1967 19 HR 23 MIN 20.48 SEC TMST 773928.9531 J.D. 2439840.3079 8 DAY 22 HR 58.8 MIN

X = -0.2C651893E C8 XC = 0.36418639E 04 ALT = 0.2232825E 06 LAT = -0.40803556E 01 VI = 0.22031770E 05  
Y = -0.43244977E 07 YC = -0.16939028E 05 R = 0.21152714E 08 LONG = 0.17723257E 03 FPAI = 0.22613006E 01  
Z = -0.14951C71E 07 ZC = -0.13609C07E C5 RDOT = 0.86930525E 03 FLP = -0.86577129E 02 PSIV = 0.12809247E 03  
XL = -0.17311172E C8 TAG = 0.30000C00E 01 GLOAD = 0.78838183E 00 FLY = 0.27074724E 04 VA = 0.20843473E 05  
YL = -0.980C1C19E 07 RCLL = -0.18315315E 01 ACC = 0.33021229E 02 RTGN = -0.51537368E 02 FPAA = 0.23902921E 01  
ZL = -0.64921529E 07 RLDCT = 0. DRAG = 0.67721407E 04 RTGL = 0.13356040E 04 PSAV = 0.13070494E 03

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15 DEC. 1967 19 HR 23 MIN 25.48 SEC TMST 773933.9531 J.D. 2439840.3080 8 DAY 22 HR 58.9 MIN

X = -0.2C633450E C8 XC = 0.37373828E 04 ALT = -0.23169575E 06 LAT = -0.42649688E 01 VI = 0.21920887E 05

Y = -0.44089289E 07 YC = -0.16835587E 05 R = 0.21157049E 08 LONG = 0.17744635E 03 FPAI = 0.22566629E 01

Z = -0.1562552E C7 ZC = -0.13532194E 05 RDOT = 0.86315717E 03 FLP = -0.71586180E 02 PSIV = 0.12806626E 03

XL = -0.17308153E C8 TAG = C.30000000E 01 GLOAD = 0.65219015E 00 FLY = 0.22386698E 04 VA = 0.20732274E 05

YL = -0.98C64141E C7 RCLL = -0.18315315E 01 ACC = 0.31376507E 02 RTGN = -0.51066153E 02 FPAA = 0.23861146E 01

ZL = -0.64921529E 07 RLCTT = 0 DRAG = 0.55995352E 04 RTGL = 0.13187328E 04 PSAV = 0.13069113E 03

15 DEC. 1967 19 HR 23 MIN 30.48 SEC TMST 773938.9531 J.D. 2439840.3080 8 DAY 22 HR 59.0 MIN

X = -0.2C6145C4E 08 XC = 0.38422894E 04 ALT = 0.23601400E 06 LAT = -0.44485867E 01 VI = 0.21828127E 05

Y = -0.163C4473E C7 YC = -0.13466316E 05 RDCI = 0.84956116E 03 LONG = 0.17765914E 03 FPAI = 0.22305425E 01

Z = -0.17304577E 08 TAG = 0.30000000E 01 GLOAD = 0.53916562E 00 FLY = 0.18500544E 04 VA = 0.20639190E 05

XL = -0.98127230E C7 RCLL = -0.18315315E 01 ACC = 0.30399536E 02 RTGN = -0.50559384E 02 FPAA = 0.23591063E 01

YL = -0.64921529E C7 RLCTT = 0 DRAG = 0.46275C02E 04 RTGL = 0.13019485E 04 PSAV = 0.13067594E 03

15 DEC. 1967 19 HR 23 MIN 35.48 SEC TMST 773943.9531 J.D. 2439840.3081 8 DAY 22 HR 59.1 MIN

X = -C.2C595C14E 08 XC = 0.39549668E 04 ALT = 0.24025000E 06 LAT = -0.46313552E 01 VI = 0.21750412E 05

Y = -0.45763852E C7 YC = -0.16662149E 05 R = 0.21165534E 08 LONG = 0.17787112E 03 FPAI = 0.21865092E 01

Z = -0.16976232E C7 ZC = -0.13409379E 05 RDOT = 0.82983306E 03 FLP = -0.48994261E 02 PSIV = 0.12801608E 03

XL = -0.173CC597E 08 TAG = 0.30000000E 01 GLOAD = 0.44641249E-00 FLY = 0.15321668E 04 VA = 0.20561146E 05

YL = -0.9819C326E 07 RCLL = -0.18315315E 01 ACC = 0.29887556E 02 RTGN = -0.50022440E 02 FPAA = 0.23130470E 01

ZL = -0.64921529E 07 RLCTT = 0 DRAG = 0.38323750E 04 RTGL = 0.12852380E 04 PSAV = 0.13065947E 03

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15 DEC. 1967 19 HR 23 MIN 40.48 SEC TMST 773948.9531 J.D. 2439840.3081 8 DAY 22 HR 59.2 MIN

X = -0.2C574544E 08	XD = 0.40740417E 04	ALT = 0.24437525E 06	LAT = -0.48133950E 01	VI = 0.21686135E 05
Y = -0.46595C80E 07	YC = -C.16588118E 05	R = 0.21169623E 08	LCNG = 0.17808244E 03	FPAI = 0.21276201E 01
Z = -0.17645532E 07	ZD = -0.13359701E C5	RDOT = 0.80507021E 03	FLP = -0.40633206E 02	PSIV = 0.12799166E 03
XL = -0.17297417E 08	TAG = 0.30000000E 01	GLOAD = 0.37033707E-00	FLY = 0.12706968E 04	VA = 0.20495539E 05
YL = -0.98252389E 07	RCLL = -0.18315315E 01	ACC = 0.29673356E 02	RTGN = -0.49461162E 02	FPAA = 0.22511740E 01
ZL = -0.64921529E 07	RLDCT = 0.	DRAG = 0.31783658E 04	RTGL = 0.12685889E 04	PSAV = 0.13064179E 03

15 DEC. 1967 19 HR 23 MIN 45.48 SEC TMST 773953.9531 J.D. 2439840.3082 8 DAY 22 HR 59.2 MIN

X = -0.2C554265E 08	XD = 0.41983564E 04	ALT = 0.24836750E 06	LAT = -0.49948052E 01	VI = 0.21630112E 05
Y = -0.47422769E 07	YC = -0.16520386E 05	R = 0.21173578E 08	LONG = 0.17829322E 03	FPAI = 0.20564572E 01
Z = -0.18312399E 07	ZD = -0.13315870E 05	RDOT = 0.77618020E 03	FLP = -0.33780900E 02	PSIV = 0.12796764E 03
XL = -0.17293832E 08	TAG = 0.30000000E 01	GLOAD = 0.30795471E-00	FLY = 0.10564089E 04	VA = 0.20440188E 05
YL = -0.98316460E C7	RCLL = -0.18315315E 01	ACC = 0.29629318E 02	RTGN = -0.48879443E 02	FPAA = 0.21762297E 01
ZL = -0.64921529E 07	RLDCT = 0.	DRAG = 0.26423723E 04	RTGL = 0.12519923E 04	PSAV = 0.13062297E 03

15 DEC. 1967 19 HR 23 MIN 50.48 SEC TMST 773958.9531 J.D. 2439840.3082 8 DAY 22 HR 59.3 MIN

X = -C.2C532953E 08	XD = 0.43269514E 04	ALT = 0.25220825E 06	LAT = -0.51756673E 01	VI = 0.21583543E 05
Y = -0.48247202E C7	YC = -C.16457684E 05	R = 0.21177380E 08	LONG = 0.17850356E 03	FPAI = 0.19751669E 01
Z = -C.18977156E C7	ZD = -0.13276726E 05	RDOT = 0.74390569E 03	FLP = -0.28157114E 02	PSIV = 0.12794327E 03
XL = -C.1729C247E 08	TAG = 0.30000000E 01	GLOAD = 0.25673277E-00	FLY = 0.88053979E 03	VA = 0.20393298E 05
YL = -0.98315497E C7	RCLL = -0.18315315E 01	ACC = 0.29707195E 02	RTGN = -0.48281382E 02	FPAA = 0.20904972E 01
ZL = -0.64921529E C7	RLDCT = 0.	DRAG = 0.22024747F 04	RTGL = 0.12354396E 04	PSAV = 0.13060305E 03

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15 DEC.	1967	19	HR	23 MIN	55.48 SEC	TMST	773963.9531	J.D.	2439840.3082	8 DAY 22 HR 59.4 MIN
X	= -0.2C51C589E 08	XD	= 0.44590244E 04	ALT	= 0.25588100E 06	LAT	= -0.53560484E 01	VI	= 0.21543937E 05	
Y	= -0.49068663E 07	YC	= -0.16398965E 05	R	= 0.21181013E 08	LONG	= 0.17871356E 03	FPAI	= 0.18855437E 01	
Z	= -0.1964C133E 07	ZC	= -0.13241311E 05	RDOT	= 0.70886029E 03	FLP	= -0.23588176E 02	PSIV	= 0.12791900E 03	
XL	= -0.1728t659E 08	TAG	= 0.30000000E 01	GLOAD	= 0.21523835E-00	FLY	= 0.73765827E 03	VA	= 0.20353377E 05	
YL	= -0.98442541E 07	RCLL	= -0.18315315E 01	ACC	= 0.29824757E 02	RTGN	= -0.47669796E 02	FPAA	= 0.19958820E 01	
ZL	= -0.64921529E 07	RDCT	= 0.	DRAG	= 0.18450883E 04	RTGL	= 0.12189248E 04	PSAV	= 0.13058209E 03	

15 DEC.	1967	19	HR	24 MIN	0.48 SEC	TMST	773968.9531	J.D.	2439840.3083	8 DAY 22 HR 59.5 MIN
X	= -0.2C488358E 08	XC	= 0.45939118E 04	ALT	= 0.25937425E 06	LAT	= -0.55360026E 01	VI	= 0.21510071E 05	
Y	= -0.49887151E 07	YD	= -0.16343370E 05	R	= 0.21184465E 08	LONG	= 0.17892328E 03	FPAI	= 0.17890647E 01	
Z	= -0.2C3C1376E C7	ZC	= -0.132088837E 05	RDOT	= 0.67154433E 03	FLP	= -0.19905157E 02	PSIV	= 0.12789453E 03	
XL	= -0.17283C69E 08	TAG	= 0.30000000E 01	GLOAD	= 0.18162817E-00	FLY	= 0.62248152E 03	VA	= 0.20319206E 05	
YL	= -0.98505551E 07	RCLL	= -0.18315315E 01	ACC	= 0.29960325E 02	RTGN	= -0.47047503E 02	FPAA	= 0.18939568E 01	
ZL	= -0.64921529E 07	RDCT	= 0.	DRAG	= 0.15569993E 04	RTGL	= 0.12024420E 04	PSAV	= 0.13056013E 03	

15 DEC.	1967	19	HR	24 MIN	5.48 SEC	TMST	773973.9531	J.D.	2439840.3083	8 DAY 22 HR 59.6 MIN
X	= -0.20465C46E 08	XD	= 0.47311031E 04	ALT	= 0.26267700E 06	LAT	= -0.57155752E 01	VI	= 0.21481005E 05	
Y	= -0.5C702982E C7	YC	= -0.16290243E 05	R	= 0.21187725E 08	LONG	= 0.17913279E 03	FPAI	= 0.16868808E 01	
Z	= -0.2C961C56E C7	ZC	= -0.13178703E 05	RDOT	= 0.63234431E 03	FLP	= -0.16799314E 02	PSIV	= 0.12786977E 03	
XL	= -0.17279476E 08	TAG	= 0.30000000E 01	GLOAD	= 0.15329878E-00	FLY	= 0.52535443E 03	VA	= 0.20289846E 05	
YL	= -0.9856857CE 07	RCLL	= -0.18315315E 01	ACC	= 0.230102788E 02	RTGN	= -0.46416039E 02	FPAA	= 0.17859459E 01	
ZL	= -0.64921529E 07	RDCT	= 0.	DRAG	= 0.13140574E 04	RTGL	= 0.11859872E 04	PSAV	= 0.13053718E 03	

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15 DEC. 1967 19 HR 24 MIN 10.48 SEC TMST 773978.9531 J.D. 2439840.3085 8 DAY 22 HR 59.7 MIN

X = -0.2C441C44E 08 XC = 0.48702195E 04 ALT = 0.26578150E 06 LAT = -0.58948036E 01 VI = 0.21456041E 05  
Y = -0.51516208E C7 YC = -0.16239093E 05 R = 0.21190786E 08 LONG = 0.17934214E 03 FPAI = 0.15798697E 01  
Z = -0.21619278E C7 ZC = -0.13150457E 05 RDOT = 0.59155235E 03 FLP = -0.14173551E 02 PSIV = 0.12784466E 03  
XL = -0.17275E81E 08 TAG = 0.30000000E 01 GLOAD = 0.12933953E-00 FLY = 0.44324059E 03 VA = 0.20264601E 05  
YL = -0.98631554E C7 RCLL = -0.18315315E 01 ACC = 0.30243223E 02 RTGN = -0.45777455E 02 FPAA = 0.16727842E 01  
ZL = -0.64921529E C7 RLCCF = 0. DRAG = 0.110866679E 04 RTGL = 0.11695558E 04 PSAV = 0.13051327E 03

15 DEC. 1967 19 HR 24 MIN 15.48 SEC TMST 773983.9531 J.D. 2439840.3085 8 DAY 22 HR 59.7 MIN

X = -0.20416342E 08 XC = 0.50109229E 04 ALT = 0.26867975E 06 LAT = -0.60737195E 01 VI = 0.21434565E 05  
Y = -0.52326917E 07 YC = -0.16189490E 05 R = 0.21193639E 08 LONG = 0.17955137E 03 FPAI = 0.14687997E 01  
Z = -0.22276127E 07 ZC = -0.13123706E 05 RDOT = 0.54942329E 03 FLP = -0.11983409E 02 PSIV = 0.12781914E 03  
XL = -0.17272283E 08 TAG = 0.30000000E 01 GLOAD = 0.10930870E-00 FLY = 0.37474963E 03 VA = 0.20242858E 05  
YL = -0.98694546E C7 RCLL = -0.18315315E 01 ACC = 0.30374369E 02 RTGN = -0.45132518E 02 FPAA = 0.15552904E 01  
ZL = -0.64921529E C7 RLCCF = 0. DRAG = 0.93735297E 03 RTGL = 0.11531457E 04 PSAV = 0.13048843E 03

15 DEC. 1967 19 HR 24 MIN 20.48 SEC TMST 773988.9531 J.D. 2439840.3086 8 DAY 22 HR 59.8 MIN

X = -0.2C39C933E C8 XC = 0.51528361E 04 ALT = 0.27136525E 06 LAT = -0.62523494E 01 VI = 0.21415918E 05  
Y = -0.53135174E C7 YC = -0.16140983E 05 R = 0.21196278E 08 LONG = 0.17976052E 03 FPAI = 0.13544709E 01  
Z = -0.22931667E 07 ZC = -0.13C98033E 05 RDOT = 0.50522464E 03 FLP = -0.10287922E 02 PSIV = 0.12779314E 03  
XL = -0.17268684E C8 TAG = 0.30000000E 01 GLOAD = 0.93872272E-01 FLY = 0.32172775E 03 VA = 0.20223958E 05  
YL = -0.987575C5E C7 RCLL = -0.18315315E 01 ACC = 0.30482692E 02 RTGN = -0.44482971E 02 FPAA = 0.14343184E 01  
ZL = -0.64921529E C7 RLCCF = 0. CRAG = 0.80473050E 03 RTGL = 0.11367530E 04 PSAV = 0.13046267E 03

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15 DEC. 1967 19 HR 24 MIN 25.48 SEC TMST 773993.9531 J.D. 2439840.3086 8 DAY 22 HR 59.9 MIN

X = -0.2C364812E 08 xC = 0.52956890E 04 ALT = 0.27383425E 06 LAT = -0.64307141E 01 VI = 0.21399625E 05  
Y = -0.53941C28E 07 YC = -0.16093249E 05 R = 0.21198699E 08 LONG = 0.1796963E 03 FPAI = 0.12374697E 01  
Z = -0.23585543E 07 ZC = -0.13073139E 05 RDOT = 0.46215149E 03 FLP = -0.89654324E 01 PSIV = 0.12776663E 03  
XL = -C.17265C82E 08 TAG = 0.3C0C0000E 01 GLOAD = 0.81756036E -01 FLY = 0.28037035E 03 VA = 0.20207428E 05  
YL = -0.9882C470E 07 RCLL = -0.18315315E 01 ACC = 0.30571901E 02 RTGN = -0.43829427E 02 FPAA = 0.13104905E 01  
ZL = -0.64921529E 07 RLCCT = 0. DRAG = 0.70128416E 03 RTGL = 0.11203762E 04 PSAV = 0.13043599E 03

15 DEC. 1967 19 HR 24 MIN 30.48 SEC TMST 773998.9531 J.D. 2439840.3087 8 DAY 22 HR 60.0 MIN

X = -0.2C337915E 08 xC = 0.54392198E 04 ALT = 0.27608225E 06 LAT = -0.66088307E 01 VI = 0.21385240E 05  
Y = -0.547445C7E 07 YC = -0.16045986E 05 R = 0.21200899E 08 LONG = 0.18017872E 03 FPAI = 0.11183359E 01  
Z = -0.24238588E 07 ZC = -0.13048744E 05 RDOT = 0.41738437E 03 FLP = -0.78459542E 01 PSIV = 0.12773955E 03  
XL = -C.17261478E 08 TAG = 0.30000000E 01 GLOAD = 0.71506749E -01 FLY = 0.24536161E 03 VA = 0.20192822E 05  
YL = -0.988883401E 07 RCLL = -0.18315315E 01 ACC = 0.30650777E 02 RTGN = -0.43173117E 02 FPAA = 0.11843855E 01  
ZL = -0.64921529E 07 RLCCT = 0. DRAG = 0.61371758E 03 RTGL = 0.11040129E 04 PSAV = 0.13040843E 03

15 DEC. 1967 19 HR 24 MIN 35.48 SEC TMST 774003.9531 J.D. 2439840.3087 8 DAY 23 HR 0.1 MIN

X = -0.2C31C419E 08 xC = 0.55832484E 04 ALT = 0.27810625E 06 LAT = -0.67867124E 01 VI = 0.21372456E 05  
Y = -0.55545C81E 07 YC = -0.15998987E 05 R = 0.21202872E 08 LONG = 0.18038782E 03 FPAI = 0.99745350E 00  
Z = -0.2489C823E 07 ZC = -0.13024655E 05 RDOT = 0.37205103E 03 FLP = -0.70348032E 01 PSIV = 0.12771188E 03  
XL = -0.17257E71E 08 TAG = 0.30000000E 01 GLOAD = 0.64114496E -01 FLY = 0.21999500E 03 VA = 0.20179833E 05  
YL = -0.98946341E 07 RCLL = -0.18315315E 01 ACC = 0.30708081E 02 RTGN = -0.42514348E 02 FPAA = 0.10564117E 01  
ZL = -0.64921529E 07 RLCCT = 0. DRAG = 0.55026862E 03 RTGL = 0.10876619E 04 PSAV = 0.13037998E 03

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15 DEC. 1967 19 HR 24 MIN 40.48 SEC TMST 774C08.9531 J.D. 2439840.3088 8 DAY 23 HR 0.2 MIN

X = -0.20282142E 08 XC = 0.57276240E 04 ALT = 0.27990325E 06 LAT = -0.69643705E 01 VI = 0.21361018E 05  
Y = -0.563444C7E C7 YC = -0.15952081E 05 R = 0.21204618E 08 LONG = 0.18059695E 03 FPAI = 0.87513676E 00  
Z = -0.25541457E C7 ZC = -0.1300714E 05 RDOT = 0.32625589E 03 FLP = -0.63163011E 01 PSIV = 0.12768359E 03  
XL = -0.17254262E C8 TAG = 0.30000000E 01 GLOAD = 0.57558656E-01 FLY = 0.19752573E 03 VA = 0.20168207E 05  
YL = -0.99CCS2267E C7 RCLL = -0.18315315E 01 ACC = 0.30760602E 02 RTGN = -0.41853683E 02 FPAA = 0.92690021E 00  
ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.49406674E 03 RTGL = 0.10713218E 04 PSAV = 0.13035066E 03

15 DEC. 1967 19 HR 24 MIN 45.60 SEC TMST 774C14.C781 J.D. 2439840.3088 8 DAY 23 HR 0.2 MIN

X = -0.2C2524C8E 08 XC = 0.58758469E 04 ALT = 0.28150800E 06 LAT = -0.71462477E 01 VI = 0.21350489E 05  
Y = -0.5716C72CE C7 YC = -0.15903963E 05 R = 0.21206169E 08 LONG = 0.18081135E 03 FPAI = 0.74853152E 00  
Z = -0.262C7116E C7 ZC = -0.12976201E 05 RDOT = 0.27892210E 03 FLP = -0.57960935E 01 PSIV = 0.12765394E 03  
XL = -0.1725C56CE 08 TAG = 0.30000000E 01 GLOAD = 0.52781368E-01 FLY = 0.18125760E 03 VA = 0.20157503E 05  
YL = -0.99C73744E C7 RCLL = -0.18315315E 01 ACC = 0.307983337E 02 RTGN = -0.41175037E 02 FPAA = 0.79283725E 00  
ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.45337563E 03 RTGL = 0.10545832E 04 PSAV = 0.13031970E 03

15 DEC. 1967 19 HR 24 MIN 50.60 SEC TMST 774C19.C781 J.D. 2439840.3090 8 DAY 23 HR 0.3 MIN

X = -0.2C222667E 08 XC = 0.602C5632E 04 ALT = 0.28284075E 06 LAT = -0.73234792E 01 VI = 0.21341181E 05  
Y = -0.57954741E C7 YC = -0.15856848E 05 R = 0.21207449E 08 LONG = 0.18102060E 03 FPAI = 0.62405901E 00  
Z = -0.26855326E C7 ZC = -0.12952189E C5 RDOT = 0.23244108E 03 FLP = -0.53709865E 01 PSIV = 0.12762434E 03  
XL = -0.17246548E 08 TAG = 0.30000000E 01 GLOAD = 0.48899322E-01 FLY = 0.16796350E 03 VA = 0.20148042E 05  
YL = -0.99136622E C7 RCLL = -0.18315315E 01 ACC = 0.30829354E 02 RTGN = -0.40512118E 02 FPAA = 0.66101801E 00  
ZL = -0.64921529E C7 RLDOT = 0. DRAG = 0.42012339E 03 RTGL = 0.10382615E 04 PSAV = 0.13028862E 03

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15 DEC. 1967 19 HR 24 MIN 55.60 SEC TMSI 774024.0781 J.D. 2439840.3090 8 DAY 23 HR 0.4 MIN

X = -0.2C1922C2E 08 XC = 0.61653284E 04 ALT = 0.28394100E 06 LAT = -0.75005096E 01 VI = 0.21332729E 05  
Y = -C.587464C1E C7 YC = -0.158C9500E 05 R = 0.21208493E 08 LONG = 0.18122992E 03 FPAI = 0.49877200E-00  
Z = -0.275C2332E 07 ZC = -0.12928021E 05 RDOT = 0.18570361E 03 FLP = -0.50202481E 01 PSIV = 0.12759408E 03  
XL = -0.17242331E 08 TAG = 0.300000C00E 01 GLOAD = 0.45691561E-01 FLY = 0.15699507E 03 VA = 0.20139453E 05  
YL = -0.991995C9E C7 RCLL = -0.18315315E 01 ACC = 0.30855196E 02 RTGN = -0.39847919E 02 FPA = 0.52832623E 00  
ZL = -0.64921929E 07 RLDCT = 0. DRAG = 0.39268830E 03 RTGL = 0.10219479E 04 PSAV = 0.13025668E 03

15 DEC. 1967 19 HR 25 MIN 0.60 SEC TMSI 774029.C781 J.D. 2439840.3091 8 DAY 23 HR 0.5 MIN

X = -0.2C161C14E 08 XC = 0.63100602E 04 ALT = 0.28480850E 06 LAT = -0.76773442E 01 VI = 0.21325002E 05  
Y = -0.59535486E 07 YC = -0.15761630E 05 R = 0.21209305E 08 LONG = 0.18143933E 03 FPAI = 0.37283185E-00  
Z = -0.28148124E C7 ZC = -0.12903618E C5 RDOT = 0.13876386E 03 FLP = -0.47948860E 01 PSIV = 0.12756314E 03  
XL = -0.17239714E 08 TAG = 0.300000C00E 01 GLOAD = 0.43613658E-01 FLY = 0.14994747E 03 VA = 0.20131609E 05  
YL = -0.99262361E C7 RCLL = -0.18315315E 01 ACC = 0.30870891E 02 RTGN = -0.39183412E 02 FPA = 0.39493434E-00  
ZL = -0.64921929E C7 RLDCT = 0. DRAG = 0.37506029E 03 RTGL = 0.10056411E 04 PSAV = 0.13022387E 03

15 DEC. 1967 19 HR 25 MIN 5.60 SEC TMSI 774034.0781 J.D. 2439840.3091 8 DAY 23 HR 0.6 MIN

X = -0.2C129102E 08 XD = 0.64546766E 04 ALT = 0.28544225E 06 LAT = -0.78539861E 01 VI = 0.21317874E 05  
Y = -0.60322571E 07 YC = -0.15713775E 05 R = 0.21209881E 08 LONG = 0.18164886E 03 FPAI = 0.24639053E-00  
Z = -0.28792688E 07 ZC = -0.12878905E C5 RDOT = 0.91673528E 02 FLP = -0.46325098E 01 PSIV = 0.1275150E 03  
XL = -0.17236C93E 08 TAG = 0.300000C00E 01 GLOAD = 0.42123497E-01 FLY = 0.14486958E 03 VA = 0.20124381E 05  
YL = -0.99325221E C7 RCLL = -0.18315315E 01 ACC = 0.308816C4E 02 RTGN = -0.38518188E 02 FPA = 0.26100372E-00  
ZL = -0.64921929E C7 RLDCT = 0. DRAG = 0.36235907E 03 RTGL = 0.98934105E 03 PSAV = 0.13019022E 03

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15 DEC. 1967 19 HR 25 MIN 10.60 SEC TMST 774C39.C781 J.D. 2439840.3092 8 DAY 23 HR 0.7 MIN

X = -0.2CC96467E 08 XC = 0.65991270E 04 ALT = 0.28584100E 06 LAT = -0.80304394E 01 VI = 0.21311268E 05  
Y = -0.611C7C56E C7 YC = -0.15665269E 05 R = 0.21210221E 08 LONG = 0.18185850E 03 FPAI = 0.11954624E-00  
Z = -0.29436CC8E C7 ZC = -C.12853834E C5 RDOT = 0.44465439E 02 FLP = -0.45294979E 01 PSIV = 0.12749917E 03  
XL = -0.172232471E 08 TAG = 0.300CCC0CE 01 GLCAC = 0.41172666E-01 FLY = 0.14164815E 03 VA = 0.20117693E 05  
YL = -0.993888C47E C7 RCLL = -0.18315315E 01 ACC = 0.30887650E 02 RTGN = -0.37852862E 02 FPAA = 0.12664024E-00  
ZL = -0.64921529E C7 RLDCT = 0. CRAG = 0.35430139E 03 RTGL = 0.97304649E 03 PSAV = 0.13015570E 03  
EQUILIBRIUM GLIDE PHASE BEGAN AT 0.29087499E 03 SECONDS WITH VELOCITY = 0.21305107E 05 AND ROOT = -0.28293000E 01

15 DEC. 1967 19 HR 25 MIN 15.60 SEC TMST 774044.0781 J.D. 2439840.3092 8 DAY 23 HR 0.7 MIN

X = -0.2CC63111E 08 XC = 0.67433591E 04 ALT = 0.28600525E 06 LAT = -0.82067055E 01 VI = 0.21305107E 05  
Y = -0.61889C96E 07 YC = -0.15616269E 05 R = 0.21210326E 08 LONG = 0.18206827E 03 FPAI = -0.76088307E-02  
Z = -0.3C078C65E C7 ZC = -0.12828361E 05 RDOT = -0.28293000E 01 FLP = -0.44855567E 01 PSIV = 0.12746612E 03  
XL = -0.17228846E 08 TAG = 0.60000000E 01 GLOAD = 0.40759739E-01 FLY = 0.14027400E 03 VA = 0.20111468E-05  
YL = -0.99450801E 07 RCLL = -0.18315315E 01 ACC = 0.30888888E 02 RTGN = -0.37187177E 02 FPAA = -0.80587690E-02  
ZL = -0.64921529E 07 RLDCT = 0. CRAG = 0.350866427E 03 RTGL = 0.95675770E 03 PSAV = 0.13012034E 03

15 DEC. 1967 19 HR 25 MIN 20.60 SEC TMST 774049.C781 J.D. 2439840.3093 8 DAY 23 HR 0.8 MIN

X = -C.2C029C34E 08 XC = 0.68873194E 04 ALT = 0.28593375E 06 LAT = -0.83827859E 01 VI = 0.21299312E 05  
Y = -0.626668074E 07 YC = -0.15566728E 05 R = 0.21210193E 08 LONG = 0.18227818E 03 FPAI = -0.13497990E-00  
Z = -0.3C718837E 07 ZC = -0.12802441E 05 RDOT = -0.50177852E 02 FLP = -0.45008489E 01 PSIV = 0.12743236E 03  
XL = -0.17225219E 08 TAG = 0.60000000E 01 GLAC = 0.40884526E-01 FLY = 0.14075223E 03 VA = 0.20105626E 05  
YL = -C.99513480E C7 RCLL = -0.18315315E 01 ACC = 0.308885194E 02 RTGN = -0.36521645E 02 FPAA = -0.14299257E-00

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ZL      = -0.64921529E C7      RLCCF = 0.      DRAG = 0.35206044E 03      RTGL = 0.94047346E 03      PSAV = 0.13008412E 03

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15 DEC. 1967 19 HR 25 MIN 25.60 SEC TMST 774054.0781 J.D. 2439840.3093 8 DAY 23 HR 0.9 MIN

X = -0.15994238E 08 XD = 0.70309531E 04 ALT = 0.28562675E 06 LAT = -0.85586826E 01 VI = 0.21293805E 05

Y = -0.63445759E C7 YC = -0.15516602E 05 R = 0.21209824E 08 LNG = 0.18248824E 03 FPAI = -0.26247733E-00

Z = -0.313582C1E C7 ZD = -0.12776029E 05 ROOT = -0.97548577E 02 FLP = -0.45751761E 01 PSIV = 0.12739787E 03

XL = -0.17221589E 08 TAG = 0.60000000E 01 GLOAD = 0.41547445E-01 FLY = 0.14307662E 03 VA = 0.20100092E 05

YL = -0.99576487E 07 RCLL = -0.18315315E 01 ACC = 0.30876456E 02 RTGN = -0.35855960E 02 FPAA = -0.27806554E-00

ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.35787438E 03 RTGL = 0.92419412E 03 PSAV = 0.13004705E 03

15 DEC. 1967 19 HR 25 MIN 30.60 SEC TMST 774059.0781 J.D. 2439840.3094 8 DAY 23 HR 1.0 MIN

X = -0.19958725E 08 XD = 0.71742040E 04 ALI = 0.28508400E 06 LAT = -0.87343943E 01 VI = 0.21288510E 05

Y = -0.6422C323E 07 YC = -0.15465844E 05 R = 0.21209218E 08 LONG = 0.18269846E 03 FPAI = -0.39001575E-00

Z = -0.31996431E C7 ZD = -0.12749081E 05 ROOT = -0.14491102E 03 FLP = -0.47084733E 01 PSIV = 0.12736264E 03

XL = -0.17217958E 08 TAG = 0.60000000E 01 GLOAD = 0.42746084E-01 FLY = 0.14724514E 03 VA = 0.20094785E 05

YL = -0.99635261E 07 RCLL = -0.18315315E 01 ACC = 0.30862618E 02 RTGN = -0.35190582E 02 FPAA = -0.41318461E-00

ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.36830101E 03 RTGL = 0.90791855E 03 PSAV = 0.13000914E 03

15 DEC. 1967 19 HR 25 MIN 35.60 SEC TMST 774C64.0781 J.D. 2439840.3094 8 DAY 23 HR 1.1 MIN

X = -0.19922497E 08 XC = 0.73170147E 04 ALT = 0.28430550E 06 LAT = -0.89099214E 01 VI = 0.21283347E 05

Y = -0.64992232E C7 YC = -0.15414412E 05 R = 0.21208375E 08 LONG = 0.18290884E 03 FPAI = -0.51750977E 00

Z = -0.326332C0E C7 ZD = -0.12721558E 05 ROOT = -0.19223388E 03 FLP = -0.49006190E 01 PSIV = 0.12732668E 03

XL = -0.17214224E 08 TAG = 0.60000000E 01 GLOAD = 0.44479756E-01 FLY = 0.15325399E 03 VA = 0.20089630E 05

YL = -0.997C2C42E C7 RCLL = -0.18315315E 01 ACC = 0.30843631E 02 RTGN = -0.34525307E 02 FPAA = -0.54826099E 00

ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.38333081E 03 RTGL = 0.89164739E 03 PSAV = 0.12997038E 03

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15 DEC. 1967 19 HR 25 MIN 40.60 SEC TMST 774069.0781 J.D. 24398840.3094 8 DAY 23 HR 1.2 MIN

X = -0.19885556E 08 XD = 0.74593125E 04 ALT = 0.28329250E 06 LAT = -0.90852628E 01 VI = 0.21278219E 05

Y = -0.65761752E 07 YD = -0.15362252E 05 R = 0.21207296E 08 LONG = 0.18311939E 03 FPAI = -0.64485950E 00

Z = -0.33268577E 07 ZD = -0.12693404E 05 RDOT = -0.23947963E 03 FLP = -0.51958223E 01 PSIV = 0.12728996E 03

XL = -0.1721C688E 08 TAG = 0.60000000E 01 GLOAD = 0.47136669E-01 FLY = 0.16248570E 03 VA = 0.20084529E 05

YL = -0.99764787E C7 RCLL = -0.18315315E 01 ACC = 0.30815307E 02 RTGN = -0.33860544E 02 FPAA = -0.68318625E 00

ZL = -0.64921929E C7 RLCCF = 0. DRAG = 0.40642189E 03 RTGL = 0.87537968E 03 PSAV = 0.12993078E 03

15 DEC. 1967 19 HR 25 MIN 45.60 SEC TMST 774074.0781 J.D. 2439840.3096 8 DAY 23 HR 1.2 MIN

X = -0.19847905E 08 XD = 0.76009860E 04 ALT = 0.28204425E 06 LAT = -0.92604156E 01 VI = 0.21272979E 05

Y = -0.665228544E 07 YD = -0.15309281E 05 R = 0.21205980E 08 LONG = 0.18333013E 03 FPAI = -0.77190784E 00

Z = -0.33902528E C7 ZE = -0.12664539E 05 RDOT = -0.28658799E 03 FLP = -0.55835166E 01 PSIV = 0.12725248E 03

XL = -0.1722C7C4E 08 TAG = 0.60000000E 01 GLOAD = 0.50645177E-01 FLY = 0.17460982E 03 VA = 0.20079331E 05

YL = -0.95827542E C7 RCLL = -0.18315315E 01 ACC = 0.30778426E 02 RTGN = -0.33196242E 02 FPAA = -0.81779733E 00

ZL = -0.64921929E C7 RLCCF = 0. DRAG = 0.43674768E 03 RTGL = 0.85911608E 03 PSAV = 0.12989034E 03

15 DEC. 1967 19 HR 25 MIN 50.60 SEC TMST 774079.0781 J.D. 24398840.3096 8 DAY 23 HR 1.3 MIN

X = -0.19809547E 08 XC = 0.77419562E 04 ALT = 0.28056175E 06 LAT = -0.94353766E 01 VI = 0.2126723E 05

Y = -0.67292666E 07 YD = -0.15255448E 05 R = 0.21204430E 08 LONG = 0.18354104E 03 FPAI = -0.89055919E 00

Z = -0.34535C18E 07 ZC = -0.12634911E 05 RDOT = -0.33352098E 03 FLP = -0.60439110E 01 PSIV = 0.12721422E 03

XL = -0.172034C8E 08 TAG = 0.60000000E 01 GLOAD = 0.54812978E-01 FLY = 0.18900744E 03 VA = 0.20073937E 05

YL = -0.99898262E 07 RCLL = -0.18315315E 01 ACC = 0.30735093E 02 RTGN = -0.32532658E 02 FPAA = -0.95199090E 00

ZL = -0.64921929E C7 RLCCF = 0. DRAG = 0.47276014E 03 RTGL = 0.84285593E 03 PSAV = 0.12984906E 03

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15 DEC. 1967 19 HR 25 MIN 55.60 SEC TMST 774084.0781 J.D. 2439840.3097 R DAY 23 HR 1.4 MIN

X = -0.1977C487E 08 XC = 0.78821169E 04 ALT = 0.27884675E 06 LAT = -0.96101415E 01 VI = 0.21261717E 05  
Y = -0.68054C14E 07 YC = -0.15200681E 05 R = 0.21202646E 08 LONG = 0.18375213E 03 FPAI = -0.10246812E 01  
Z = -0.35166C06E 07 ZC = -0.12604450E 05 RDOT = -0.38022557E 03 FLP = -0.66673502E 01 PSIV = 0.12717518E 03  
XL = -0.17195765E 08 TAG = 0.6000000CE 01 GLOAD = 0.60433124E-01 FLY = 0.20850387E 03 VA = 0.20066820BE 05  
YL = -0.9995299CE 07 RCLL = -0.18315315E 01 ACC = 0.30677057E 02 RTGN = -0.31869739E 02 FPAA = -0.10856278E 01  
ZL = -0.64921929E 07 RLDCOT = 0. DRAG = 0.52152612E 03 RTGL = 0.82659982E 03 PSAV = 0.12980696E 03

15 DEC. 1967 19 HR 26 MIN 0.60 SEC TMST 774089.0781 J.D. 2439840.3097 R DAY 23 HR 1.5 MIN

X = -0.19730728E 08 XC = 0.80212839E 04 ALT = 0.27690000E 06 LAT = -0.97847043E 01 VI = 0.21255321E 05  
Y = -0.68612716E 07 YC = -0.15144854E 05 R = 0.21200628E 08 LONG = 0.18396341E 03 FPAI = -0.11500374E 01  
Z = -0.35795447E 07 ZC = -0.12573030E 05 RDOT = -0.426660685E 03 FLP = -0.74246718E 01 PSIV = 0.12713532E 03  
XL = -0.17196118E 08 TAG = 0.60000000E 01 GLCAD = 0.67294031E-01 FLY = 0.23218711E 03 VA = 0.20061907E 05  
YL = -0.1CCC1570E 08 RCLL = -0.18315315E 01 ACC = 0.30606903E 02 RTGN = -0.31207896E 02 FPAA = -0.12184579E 01  
ZL = -0.64921929E 07 RLDCOT = 0. DRAG = 0.58076449E 03 RTGL = 0.81034794E 03 PSAV = 0.12976404E 03

15 DEC. 1967 19 HR 26 MIN 5.60 SEC TMST 774094.0781 J.D. 2439840.3098 R DAY 23 HR 1.6 MIN

X = -0.1969C276E 08 XC = 0.81593154E 04 ALT = 0.27472325E 06 LAT = -0.99590574E 01 VI = 0.21248159E 05  
Y = -0.6956854CE 07 YC = -0.15087879E 05 R = 0.21198380E 08 LONG = 0.18417488E 03 FPAI = -0.12744638E 01  
Z = -0.36423291E 07 ZC = -0.12540563E 05 RDOT = -0.47259633E 03 FLP = -0.83957368E 01 PSIV = 0.12709465E 03  
XL = -0.17192471E 08 TAG = 0.60000000E 01 GLOAD = 0.76047859E-01 FLY = 0.26255462E 03 VA = 0.20054856E 05  
YL = -0.1CCC7838E 08 RCLL = -0.18315315E 01 ACC = 0.30518443E 02 RTGN = -0.30547436E 02 FPAA = -0.13503096E 01  
ZL = -0.64921929E 07 RLDCOT = 0. DRAG = 0.65672207E 03 RTGL = 0.79410017E 03 PSAV = 0.12972030E 03

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15 DEC. 1967 19 FR 26 MIN 10.60 SEC TMST 774C99.0781 J.D. 2439840.3098 8 DAY 23 HR 1.7 MIN

X = -0.19649137E 08 XD = 0.82959415E 04 ALT = 0.27231925E 06 LAT = -0.10133189E 02 VI = 0.21239885E 05

Y = -0.70321482E 07 YC = -0.15029579E 05 R = 0.21195903E 08 LONG = 0.18438652E 03 FPAI = -0.13976266E 01

Z = -0.37049482E 07 ZD = -0.125066871E 05 RDOT = -0.51805708E 03 FLP = -0.95637975E 01 PSIV = 0.12705312E 03

XL = -C.17188821E 08 TAG = 0.60000000E 01 GLOAD = 0.866335965E-01 FLY = 0.29908265E 03 VA = 0.20046711E 05

YL = -0.1C0141C7E 08 RCLL = -0.18315315E 01 ACC = 0.30413308E 02 RTGN = -0.29888411E 02 FPAA = -0.14808303E 01

ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.74808882E 03 RTGL = 0.77785789E 03 PSAV = 0.12967577E 03

15 DEC. 1967 19 FR 26 MIN 15.60 SEC TMST 774104.0781 J.D. 2439840.3099 8 DAY 23 HR 1.7 MIN

X = -0.19607319E 08 XD = 0.84308953E 04 ALT = 0.26969050E 06 LAT = -0.10307089E 02 VI = 0.21230167E 05

Y = -0.71C71473E 07 YC = -0.149697187E 05 R = 0.21193201E 08 LONG = 0.18459833E 03 FPAI = -0.15192133E 01

Z = -0.37673555E 07 ZC = -0.12411787E 05 RDOT = -0.56285775E 03 FLP = -0.11122941E 02 PSIV = 0.12701072E 03

XL = -0.17185169E 08 TAG = 0.60000000E 01 GLOAD = 0.10069786E-00 FLY = 0.34784078E 03 VA = 0.20037136E 05

YL = -0.1C02C372E 08 ROLL = -0.18315315E 01 ACC = 0.30277009E 02 RTGN = -0.29231435E 02 FPAA = -0.16096903E 01

ZL = -0.64921529E 07 RLCT = 0. DRAG = 0.87004646E 03 RTGL = 0.76162144E 03 PSAV = 0.12963006E 03

15 DEC. 1967 19 FR 26 MIN 20.60 SEC TMST 774109.0781 J.D. 2439840.3099 8 DAY 23 HR 1.8 MIN

X = -0.19564831E 08 XD = 0.85638005E 04 ALT = 0.26684100E 06 LAT = -0.10480743E 02 VI = 0.21218533E 05

Y = -0.71818432E 07 YE = -0.14908267E 05 R = 0.21190276E 08 LONG = 0.18481030E 03 FPAI = -0.16387741E 01

Z = -0.38296634E C7 ZD = -0.12435074E 05 RDOT = -0.60680982E 03 FLP = -0.13030160E 02 PSIV = 0.12696740E 03

XL = -0.17181514E 08 TAG = 0.60000000E C1 GLOAD = 0.117882888E-00 FLY = 0.40748404E 03 VA = 0.20025660E 05

YL = -0.1C026639E 08 RCLL = -0.18315315E 01 ACC = 0.30116310E 02 RTGN = -0.28576560E 02 FPAA = -0.17364193E 01

ZL = -0.64921929E C7 RLCT = 0. DRAG = 0.10192308E 04 RTGL = 0.74539256E 03 PSAV = 0.12958438E 03

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15 DEC. 1967 19 HR 26 MIN 25.60 SEC TMSI 774114.0781 J.D. 2439840.3101 8 DAY 23 HR 1.9 MIN

X = -0.19521685E 08 XC = 0.86941506E 04 ALT = 0.26377525E 06 LAT = -0.10654126E 02 VI = 0.21204352E 05  
Y = -0.72562266E C7 YC = -0.14844704E 05 R = 0.21187135E 08 LONG = 0.18502242E 03 FPAI = -0.17557044E 01  
Z = -0.38917430E C7 ZC = -0.12396413E 05 RDOT = -0.64965951E 03 FLP = -0.15380578E 02 PSIV = 0.12692311E 03  
XL = -0.17177858E 08 TAG = 0.60000000E 01 GLOAD = 0.13910183E-00 FLY = 0.48098719E 03 VA = 0.20011650E 05  
YL = -0.1C0325C1E 08 RCLL = -0.18315315E 01 ACC = 0.29928026E 02 RTGN = -0.27924809E 02 FPAA = -0.18603787E 01  
ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.12030826E 04 RTGL = 0.72917243E 03 PSAV = 0.12953756E 03

15 DEC. 1967 19 HR 26 MIN 30.60 SEC TMSI 774119.0781 J.D. 2439840.3101 8 DAY 23 HR 2.0 MIN

X = -0.19477895E 08 XC = 0.88214696E 04 ALT = 0.26049925E 06 LAT = -0.10827214E 02 VI = 0.21187041E 05  
Y = -0.733C2864E C7 YC = -0.1477819E 05 R = 0.21183782E 08 LONG = 0.18523465E 03 FPAI = -0.18694706E 01  
Z = -0.39536238E C7 ZC = -0.12355521E 05 RDOT = -0.691117693E 03 FLP = -0.18216601E 02 PSIV = 0.12687781E 03  
XL = -0.17174198E 08 TAG = 0.60000000E 01 GLOAD = 0.16479323E-00 FLY = 0.56967635E 03 VA = 0.19994521E 05  
YL = -0.1CC39165E 08 RCLL = -0.18315315E C1 ACC = 0.29715595E 02 RTGN = -0.27276235E 02 FPAA = -0.19810127E 01  
ZL = -0.64921529E 07 RLCT = 0. DRAG = 0.14249189E 04 RTGL = 0.71296355E 03 PSAV = 0.12949004E 03

15 DEC. 1967 19 HR 26 MIN 35.60 SEC TMSI 774124.0781 J.D. 2439840.3102 8 DAY 23 HR 2.1 MIN

X = -0.19433477E 08 XC = 0.89452437E 04 ALT = 0.25702150E 06 LAT = -0.1099975E 02 VI = 0.21165978E 05  
Y = -0.7404C1C4E C7 YC = -0.14710320E 05 R = 0.21180226E 08 LONG = 0.18544696E 03 FPAI = -0.19795143E 01  
Z = -0.4C152540E C7 ZC = -0.12312097E C5 RDOT = -0.73111880E 03 FLP = -0.21565001E 02 PSIV = 0.12663146E 03  
XL = -0.1717C537E 08 TAG = 0.60000000E C1 GLCAC = 0.195033324E-0C FLY = 0.67438877E 03 VA = 0.1993652E 05  
YL = -0.C1C045425E 08 RCLL = -0.18315315E 01 ACC = 0.29488877E 02 RTGN = -0.26631759E 02 FPAA = -0.20977321E 01  
ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.16868337E 04 RTGL = 0.69676833E 03 PSAV = 0.12944185E 03

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15 DEC. 1967 19 HR 26 MIN 40.60 SEC TMST 774129.0781 J.D. 2439840.3102 8 DAY 23 HR 2.2 MIN

X = -0.19388449E 08 XC = 0.90648175E 04 ALT = 0.25334850E 06 LAT = -0.11172375E 02 VI = 0.21140372E 05  
Y = -C.74773846E 07 YC = -0.146388835E 05 R = 0.21176474E 08 LONG = 0.18565932E 03 FPAI = -0.20851150E 01  
Z = -0.4C767400E 07 ZC = -0.12265763E 05 RDOT = -0.76917319E 03 FLP = -0.25611828E 02 PSIV = 0.12678399E 03  
XL = -0.17166673E 08 TAG = 0.60000000E 01 GLOAD = 0.23152923E-00 FLY = 0.80094267E 03 VA = 0.19948248E 05  
YL = -C.1C051686E 08 RCLL = -0.18315315E 01 ACC = -0.29250710E 02 RTGN = -0.25991587E 02 FPAA = -0.22097813E 01  
ZL = -0.64921929E 07 RLCT = 0. DRAG = 0.20033802E 04 RTGL = 0.68059029E 03 PSAV = 0.12939302E 03

15 DEC. 1967 19 HR 26 MIN 45.60 SEC TMST 774134.C781 J.D. 2439840.3103 8 DAY 23 HR 2.2 MIN

X = -0.19342837E 08 XC = 0.91793037E 04 ALT = 0.24949225E 06 LAT = -0.11344368E 02 VI = 0.21109147E 05  
Y = -0.75503929E C7 YC = -0.14563856E 05 R = 0.21172538E 08 LONG = 0.18587169E 03 FPAI = -0.21852610E 01  
Z = -0.41379459E C7 ZC = -0.12215997E C5 RDOT = -0.80490766E 03 FLP = -0.30534177E 02 PSIV = 0.12673532E 03  
XL = -0.1716327E 08 TAG = 0.60000000E 01 GLOAD = 0.27590775E-00 FLY = 0.95487619E 03 VA = 0.19917232E 05  
YL = -C.1C0517943E 08 RCLL = -0.18315315E 01 ACC = 0.29016023E 02 RTGN = -0.25356998E 02 FPAA = -0.23161026E 01  
ZL = -0.64921929E C7 RLCT = 0. DRAG = 0.238884107E 04 RTGL = 0.66443281E 03 PSAV = 0.12934361E 03

15 DEC. 1967 19 HR 26 MIN 50.60 SEC TMST 774139.0781 J.D. 2439840.3103 8 DAY 23 HR 2.3 MIN

X = -0.19296666E 08 XC = 0.92876301E 04 ALT = 0.24546500E 06 LAT = -0.111515902E 02 VI = 0.21071011E 05  
Y = -0.7623C164E 07 YC = -0.1448478CE 05 R = 0.21168430E 08 LONG = 0.18608398E 03 FPAI = -0.22787423E 01  
Z = -0.41986932E 07 ZC = -0.12162179E 05 RDOT = -0.83780597E 03 FLP = -0.36491006E 02 PSIV = 0.12668535E 03  
XL = -0.17159538E 08 TAG = 0.60000000E 01 GLOAD = 0.32961056E-00 FLY = 0.11411604E 04 VA = 0.19879307E 05  
YL = -0.1CC642C1E 08 RCLL = -0.18315315E 01 ACC = 0.28816211E 02 RTGN = -0.24728609E 02 FPAA = -0.24154238E 01  
ZL = -0.64921929E C7 RLCT = 0. DRAG = 0.28543592E 04 RTGL = 0.64830151E 03 PSAV = 0.12929368E 03

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15 DEC. 1967 19 HR 26 MIN 55.60 SEC TMSI 774144.0781 J.D. 2439840.3104 8 DAY 23 HR 2.4 MIN  
 $X = -0.19249973E\ 08$   $XC = 0.93885352E\ 04$   $ALT = 0.24120300E\ 06$   $LAT = -0.11686907E\ 02$   $VI = 0.21024449E\ 05$   
 $Y = -0.7695228E\ C7$   $YC = -0.14400904E\ 05$   $R = 0.2116165E\ 08$   $LONG = 0.18629614E\ 03$   $FPAI = -0.23641359E\ 01$   
 $Z = -0.42595598E\ C7$   $ZC = -0.12103588E\ 05$   $RDOT = -0.86726375E\ 03$   $FLP = -0.43673069E\ 02$   $PSIV = 0.12663397E\ 03$   
 $XL = -0.17155868E\ 08$   $TAG = 0.60000000E\ 01$   $GLOAD = 0.39435071E-00$   $FLY = 0.13657605E\ 04$   $VA = 0.19832957E\ 05$   
 $YL = -0.1CC70456E\ 08$   $RCLL = -0.18315315E\ 01$   $ACC = 0.28702322E\ 02$   $RIGN = -0.24107904E\ 02$   $FPAAL = -0.25062517E\ 01$   
 $ZL = -0.64921529E\ 07$   $RLDT = 0.$   $DRAG = 0.34161467E\ 04$   $RIGL = 0.63220153E\ 03$   $PSAV = 0.12924332E\ 03$

15 DEC. 1967 19 HR 27 MIN 0.60 SEC TMSI 774149.0781 J.D. 2439840.3104 8 DAY 23 HR 2.5 MIN  
 $X = -0.19202796E\ 08$   $XC = 0.94805156E\ 04$   $ALT = 0.23696425E\ 06$   $LAT = -0.11857310E\ 02$   $VI = 0.20967666E\ 05$   
 $Y = -0.7767C161E\ 07$   $YC = -0.14311406E\ 05$   $R = 0.21159764E\ 08$   $LONG = 0.18650805E\ 03$   $FPAI = -0.24397452E\ 01$   
 $Z = -0.43199197E\ 07$   $ZC = -0.12039373E\ 05$   $RDOT = -0.89256670E\ 03$   $FLP = -0.52222833E\ 02$   $PSIV = 0.12658103E\ 03$   
 $XL = -0.17152195E\ 08$   $TAG = 0.60000000E\ 01$   $GLOAD = 0.47194042E-00$   $FLY = 0.16350083E\ 04$   $VA = 0.19776380E\ 05$   
 $YL = -0.10076711E\ 08$   $RUL = -0.18315315E\ 01$   $ACC = 0.28752972E\ 02$   $RIGN = -0.23495959E\ 02$   $FPAAL = -0.25866061E\ 01$   
 $ZL = -0.64921529E\ 07$   $RLDT = 0.$   $DRAG = 0.40896100E\ 04$   $RIGL = 0.61614111E\ 03$   $PSAV = 0.12919262E\ 03$

15 DEC. 1967 19 HR 27 MIN 5.60 SEC TMSI 774154.0781 J.D. 2439840.3105 8 DAY 23 HR 2.6 MIN  
 $X = -0.19155105E\ 08$   $XC = 0.95618335E\ 04$   $ALT = 0.23253125E\ 06$   $LAT = -0.12027015E\ 02$   $VI = 0.20896590E\ 05$   
 $Y = -0.78383360E\ C7$   $YC = -0.14215343E\ 05$   $R = 0.21155248E\ 08$   $LONG = 0.18671962E\ 03$   $FPAI = -0.25036067E\ 01$   
 $Z = -0.43799426E\ 07$   $ZC = -0.11968560E\ 05$   $RDOT = -0.91289796E\ 03$   $FLP = -0.62510561E\ 02$   $PSIV = 0.12652637E\ 03$   
 $XL = -0.17148519E\ 08$   $TAG = 0.60000000E\ 01$   $GLOAD = 0.56408892E\ 00$   $FLY = 0.19548536E\ 04$   $VA = 0.19707503E\ 05$   
 $YL = -0.10082956E\ 08$   $RCLL = -0.18315315E\ 01$   $ACC = 0.29078952E\ 02$   $RIGN = -0.22894465E\ 02$   $FPAAL = -0.26550251E\ 01$   
 $ZL = -0.64921529E\ 07$   $RLDT = 0.$   $DRAG = 0.48896321E\ 04$   $RIGL = 0.60012861E\ 03$   $PSAV = 0.12914169E\ 03$

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15 DEC. 1967 19 HR 27 MIN 10.60 SEC TMSI 774159.0781 J.D. 2439840.3105 8 DAY 23 HR 2.7 MIN

X = -0.191C7199E 08 XC = 0.96305215E 04 ALT = 0.22801275E 06 LAT = -0.12195903E 02 VI = 0.20814888E 05

Y = -0.79091569E 07 YD = -0.14111666E 05 R = 0.21150645E 08 LONG = 0.18693069E 03 FPAI = -0.25534978E 01

Z = -0.44395926E 07 ZC = -0.1189C058E 05 RDOT = -0.92734887E 03 FLP = -0.74524947E 02 PSIV = 0.12646981E 03

XL = -0.17144842E 08 TAG = 0.60000000E 01 GLOAD = 0.67233749E 00 FLY = 0.23305720E 04 VA = 0.19623983E 05

YL = -0.1C089216E 08 RCLL = -0.18315315E 01 ACC = 0.29820564E 02 RTGN = -0.22305318E 02 FPAA = -0.27085704E 01

ZL = -0.64921929E 07 RLDT = 0. DRAG = 0.58294083E 04 RTGL = 0.58417442E 03 PSAV = 0.12909066E 03

15 DEC. 1967 19 HR 27 MIN 15.60 SEC TMSI 774166.0781 J.D. 2439840.3105 8 DAY 23 HR 2.7 MIN

X = -0.19058965E 08 XC = 0.96843933E 04 ALT = 0.22343875E 06 LAT = -0.12363847E 02 VI = 0.20713970E 05

Y = -0.79794380E 07 YD = -0.13999221E 05 R = 0.21145986E 08 LONG = 0.16114109E 03 FPAI = -0.25869341E 01

Z = -0.44988284E 07 ZC = -0.11802665E 05 RDOT = -0.93492873E 03 FLP = -0.88727972E 02 PSIV = 0.12641112E 03

XL = -0.17141162E 08 TAG = 0.60000000E 01 GLOAD = 0.79900716E 00 FLY = 0.27747343E 04 VA = 0.19523227E 05

YL = -0.1C095467E 08 RCLL = -0.18315315E 01 ACC = 0.31156857E 02 RTGN = -0.21730003E 02 FPAA = -0.27448293E 01

ZL = -0.64921929E 07 RLDT = 0. DRAG = 0.69403816E 04 RTGL = 0.56829184E 03 PSAV = 0.12903969E 03

15 DEC. 1967 19 HR 27 MIN 20.60 SEC TMSI 774169.0781 J.D. 2439840.3107 8 DAY 23 HR 2.8 MIN

X = -0.19010383E 08 XC = 0.972111097E 04 ALT = 0.21884650E 06 LAT = -0.12530691E 02 VI = 0.20593073E 05

Y = -0.80491324E 07 YD = -0.13876787E 05 R = 0.21141309E 08 LONG = 0.18735063E 03 FPAI = -0.26012408E 01

Z = -0.45576222E 07 ZC = -0.11705103E 05 RDOT = -0.93460880E 03 FLP = -0.10498698E 03 PSIV = 0.12635005E 03

XL = -0.17137481E 08 TAG = 0.60000000E 01 GLOAD = 0.94621018E 00 FLY = 0.32831922E 04 VA = 0.19402463E 05

YL = -0.1C1C115E 08 RCLL = -0.18315315E 01 ACC = 0.33236822E 02 RTGN = -0.21171082E 02 FPAA = -0.27609819E 01

ZL = -0.64921929E 07 RLDT = 0. DRAG = 0.82121761E 04 RTGL = 0.55249500E 03 PSAV = 0.12908966E 03

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15 DEC.	1967	19 HR	27 MIN	25.60 SEC	TMSI	774174.0781	J.D.	2439840.3107	8 DAY 23 HR	2.9 MIN
X	= -0.18961724E 08	XC	= 0.97383193E 04	ALT	= 0.21427850E 06	LAT	= -0.12696257E 02	VI	= 0.20449419E 05	
Y	= -0.81181071E 07	YC	= -0.13743154E 05	R	= 0.21136655E 08	LCNG	= 0.18755907E 03	FPAI	= -0.25937165E 01	
Z	= -0.46158602E 07	ZD	= -0.11596104E 05	RDOT	= -0.92540643E 03	FLP	= -0.12323409E 03	PSIV	= 0.12628636E 03	
XL	= -0.17133795E 08	TAG	= 0.6C000000E 01	GLOAD	= 0.11105156E 01	FLY	= 0.38538225E 04	VA	= 0.19258908E 05	
YL	= -0.1C1C7964E 08	RCLL	= -0.18315315E C1	ACC	= -0.36148247E 02	RTGN	= -0.20629988E 02	FPAIA	= -0.27541687E 01	
ZL	= -0.64921629E 07	RLOCT	= 0.	DRAG	= 0.96394811E 04	RTGL	= 0.53680166E 03	PSAV	= 0.12893863E 03	

15 DEC.	1967	19 HR	27 MIN	30.60 SEC	TMSI	774179.0781	J.D.	2439840.3108	8 DAY 23 HR	3.0 MIN
X	= -0.18913C36E 08	XC	= 0.97338025E 04	ALT	= 0.20978050E 06	LAT	= -0.12860344E 02	VI	= 0.20280388E 05	
Y	= -0.81865434E 07	YC	= -0.13597193E 05	R	= 0.21132071E 08	LONG	= 0.18776616E 03	FPAI	= -0.25617768E 01	
Z	= -0.46735442E 07	ZD	= -0.11474475E 05	RDOT	= -0.90646324E 03	FLP	= -0.14326133E 03	PSIV	= 0.12621977E 03	
XL	= -0.1713C110E 08	TAG	= 0.60000000E 01	GLOAD	= 0.12908663E 01	FLY	= 0.44801220E 04	VA	= 0.19089933E 05	
YL	= -0.1C114209E 08	RCLL	= -0.18315315E 01	ACC	= 0.39897020E 02	RTGN	= -0.20109387E 02	FPAIA	= -0.27216451E 01	
ZL	= -0.64921629E C7	RLOCT	= 0.	DRAG	= 0.11206030E 05	RTGL	= 0.52123039E 03	PSAV	= 0.12888893E 03	

15 DEC.	1967	19 HR	27 MIN	35.60 SEC	TMSI	774184.0781	J.D.	2439840.3108	8 DAY 23 HR	3.1 MIN
X	= -0.18864428E 08	XC	= 0.97056774E 04	ALT	= 0.20540375E 06	LAT	= -0.13022734E 02	VI	= 0.20083744E 05	
Y	= -0.82541370E 01	YC	= -0.13437962E 05	R	= 0.21127608E 08	LONG	= 0.18797161E 03	FPAI	= -0.25031994E 01	
Z	= -0.473C5823E 07	ZD	= -0.11339215E 05	RDOT	= -0.87716103E 03	FLP	= -0.16468147E 03	PSIV	= 0.12615001E 03	
XL	= -0.17126421E 08	TAG	= 0.6C000000E 01	GLOAD	= 0.14837923E 01	FLY	= 0.51499805E 04	VA	= 0.18893298E 05	
YL	= -C1C12C435E C8	RCLL	= -0.18315315E 01	ACC	= 0.44391536E 02	RTGN	= -0.19610405E 02	FPAIA	= -0.26610331E 01	
ZL	= -0.64921629E C7	RLOCT	= 0.	DRAG	= 0.12881532E 05	RTGL	= 0.50580320E 03	PSAV	= 0.12884004E 03	

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15 DEC. 1967 19 HR 27 MIN 40.60 SEC TWST 774189.C781 J.D. 2439840.3109 8 DAY 23 HR 3.2 MIN											
X	= -0.18816C21E 08	XC	= 0.96523669E 04	ALT	= 0.20119925E 06	LAT	= -0.13183190E 02	VI	= 0.19857592E 05	FPAI	= -0.24160232E 01
Y	= -0.83208997E 07	YD	= -0.13264667E 05	R	= 0.21123317E 08	LONG	= 0.18817509E 03	PSIV	= 0.12607679E 03	FPAI	= -0.24160232E 01
Z	= -0.47869104E 07	ZD	= -0.11189477E 05	RDOT	= -0.83709805E 03	FLP	= -0.18760476E 03	PSIV	= 0.12607679E 03	FPAI	= -0.24160232E 01
XL	= -0.17122730E 08	TAG	= 0.60000000E 01	GLOAD	= 0.16900382E 01	FLY	= 0.58668460E 04	VA	= 0.18667103E 05	FPAI	= -0.24160232E 01
YL	= -0.10126698E 08	RCLL	= -0.18315315E 01	ACC	= 0.49603794E 02	RTGN	= -0.19135399E 02	FPAI	= -0.25702036E 01	FPAI	= -0.24160232E 01
ZL	= -0.64921529E 07	DRAG	= 0.14674612E 05	RTGL	= 0.49054246E 03	PSAV	= 0.12879218E 03	PSAV	= 0.12879218E 03	PSAV	= 0.12879218E 03

15 DEC. 1967 19 HR 27 MIN 45.60 SEC TWST 774194.0781 J.D. 2439840.3109 8 DAY 23 HR 3.2 MIN											
X	= -0.18767948E 08	XD	= 0.95722109E 04	ALT	= 0.19722300E 06	LAT	= -0.13341459E 02	VI	= 0.19599895E 05	FPAI	= -0.22979684E 01
Y	= -0.83867589E 07	YD	= -0.13076427E 05	R	= 0.21119255E 08	LONG	= 0.18837628E 03	PSIV	= 0.12599977E 03	FPAI	= -0.22979684E 01
Z	= -0.48424516E 07	ZD	= -0.11024224E 05	RDOT	= -0.78588451E 03	FLP	= -0.21180969E 03	PSIV	= 0.18409303E 05	FPAI	= -0.22979684E 01
XL	= -0.17119C36E 08	TAG	= 0.60000000E 01	GLOAD	= 0.19078372E 01	FLY	= 0.66237919E 04	VA	= 0.18409303E 05	FPAI	= -0.22979684E 01
YL	= -0.10132941E 08	RCLL	= -0.18315315E 01	ACC	= 0.55441813E 02	RTGN	= -0.18686007E 02	FPAI	= -0.24466728E 01	FPAI	= -0.22979684E 01
ZL	= -0.64921529E 07	DRAG	= 0.16567944E 05	RTGL	= 0.47547352E 03	PSAV	= 0.12874557E 03	PSAV	= 0.12874557E 03	PSAV	= 0.12874557E 03

15 DEC. 1967 19 HR 27 MIN 50.60 SEC TWST 774199.0781 J.D. 2439840.3110 8 DAY 23 HR 3.3 MIN											
X	= -0.1872C345E 08	XC	= 0.94645942E 04	ALT	= 0.19353000E 06	LAT	= -0.13497278E 02	VI	= 0.19309813E 05	FPAI	= -0.21479741E 01
Y	= -0.84516386E 07	YD	= -0.12872895E 05	R	= 0.21115477E 08	LONG	= 0.18857479E 03	PSIV	= -0.23570830E 03	PSIV	= 0.12591864E 03
Z	= -0.48971274E 07	ZD	= -0.10843381E 05	RDOT	= -0.72374026E 03	FLP	= -0.23570830E 03	PSIV	= 0.12591864E 03	PSIV	= 0.12591864E 03
XL	= -0.17115341E 08	TAG	= 0.6C000000E 01	GLOAD	= 0.21231419E 01	FLY	= 0.73711582E 04	VA	= 0.18119059E 05	FPAI	= -0.22892070E 01
YL	= -0.1C139181E 08	RCLL	= -0.18315315E 01	ACC	= 0.614666678E 02	RTGN	= -0.18264229E 02	FPAI	= -0.22892070E 01	FPAI	= -0.22892070E 01
ZL	= -0.64921529E 07	DRAG	= 0.18437315E 05	RTGL	= 0.46062188E 03	PSAV	= 0.12870042E 03	PSAV	= 0.12870042E 03	PSAV	= 0.12870042E 03

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15 DEC. 1967 19 HR 27 MIN 55.60 SEC TMST 774204.0781 J.D. 2439840.3110 8 DAY 23 HR 3.4 MIN

X = -0.18673346E 08 XC = 0.93309110E 04 ALT = 0.19017175E 06 LAT = -0.13650378E 02 VI = 0.18988859E 05

Y = -0.85154637E 07 YC = -0.12654805E 05 R = 0.21112034E 08 LCNG = 0.18877030E 03 FPAI = -0.19675700E 01

Z = -0.49508604E C7 ZD = -0.10647384E 05 ROOT = -0.65196018E 03 FLP = -0.25771753E 03 PSIV = 0.12583330E 03

XL = -0.17111643E 08 TAG = 0.60000000E 01 GLOAD = 0.23215089E 01 FLY = 0.80594391E 04 VA = 0.17797885E 05

YL = -0.1C145422E C8 ROLL = -0.18315315E 01 ACC = 0.67196377E 02 RTGN = -0.17869501E 02 FPAA = -0.20992894E 01

ZL = -0.64921529E C7 DRAG = 0.20158897E 05 RTGL = 0.44601428E 03 PSAV = 0.12865685E 03

15 DEC. 1967 19 HR 28 MIN 0.60 SEC TMST 774209.0781 J.D. 2439840.3112 8 DAY 23 HR 3.5 MIN

X = -0.18627C75E C8 XC = 0.91740421E 04 ALT = 0.18719200E 06 LAT = -0.13800523E 02 VI = 0.18640281E 05

Y = -0.85781647E 07 YC = -0.12423669E 05 R = 0.21108970E 08 LONG = 0.18896243E 03 FPAI = -0.17602584E 01

Z = -0.5C035786E C7 ZD = -0.10437887E 05 RDCT = -0.57258231E 03 FLP = -0.27628980E 03 PSIV = 0.12574373E 03

XL = -0.17107943E 08 TAG = 0.6C000000E 01 GLOAD = 0.24890195E 01 FLY = 0.86402379E 04 VA = 0.17449034E 05

YL = -0.1C151659E 08 ROLL = -0.18315315E 01 ACC = 0.72157639E 02 RTGN = -0.17501053E 02 FPAA = -0.18804714E 01

ZL = -0.64921529E C7 DRAG = 0.21611636E 05 RTGL = 0.43167419E 03 PSAV = 0.12861493E 03

15 DEC. 1967 19 HR 28 MIN 5.60 SEC TMST 774214.0781 J.D. 2439840.3112 8 DAY 23 HR 3.6 MIN

X = -0.18581638E 08 XC = 0.89979924E 04 ALT = 0.18462200E 06 LAT = -0.13947497E 02 VI = 0.18268656E 05

Y = -0.86396819E 07 YC = -0.12181602E 05 R = 0.21106317E 08 LONG = 0.18915092E 03 FPAI = -0.15311320E 01

Z = -0.50552201E C7 ZD = -0.10217069E 05 ROOT = -0.48814059E 03 FLP = -0.29070813E 03 PSIV = 0.12565010E 03

XL = -0.171C4240E 08 TAG = 0.6C000000E 01 GLOAD = 0.26200284E 01 FLY = 0.90911335E 04 VA = 0.17077089E 05

YL = -0.1C157897E 08 RCLL = -0.18315315E 01 ACC = 0.76125831E 02 RTGN = -0.1715669E 02 FPAA = -0.16379955E 01

ZL = -0.64921529E 07 RLDCFT = 0. CRAG = 0.22739451E 05 RTGL = 0.41762354E 03 PSAV = 0.12857464E 03

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15 DEC. 1967 19 HR 28 MIN 10.60 SEC TMST 774219.0781 J.D. 2439840.3113 8 DAY 23 HR 3.7 MIN

X = -0.18537117E 08 XC = 0.88085465E 04 ALT = 0.18247850E 06 LAT = -0.14091139E 02 VI = 0.17880701E 05  
Y = -0.8659960CE C7 YC = -0.11931720E 05 R = 0.21104091E 08 LCNG = 0.18933551E 03 FPAI = -0.12880857E 01  
Z = -0.51057361E C7 ZC = -0.99881456E 04 RDOT = -0.40194821E 03 FLP = -0.30057660E 03 PSIV = 0.12555281E 03  
XL = -0.171CC536E 08 TAG = 0.60000000E 01 GLOAD = 0.27093666E 01 FLY = 0.93997439E 04 VA = 0.16688779E 05  
YL = -0.1C164132E 08 RCLL = -0.18315315E 01 ACC = 0.78906540E 02 RTGN = -0.16830860E 02 FPAA = -0.13800969E 01  
ZL = -0.64921529E 07 RLDT = 0. DRAG = 0.23511372E 05 RTGL = 0.40387847E 03 PSAV = 0.12853585E 03

15 DEC. 1967 19 HR 28 MIN 15.60 SEC TMST 774224.0781 J.D. 2439840.3113 8 DAY 23 HR 3.7 MIN

X = -0.18493566E 08 XC = 0.86109443E 04 ALT = 0.18076375E 06 LAT = -0.14231338E 02 VI = 0.17482536E 05  
Y = -0.875859C7E C7 YC = -0.11676865E 05 R = 0.21102296E 08 LONG = 0.18951603E 03 FPAI = -0.10385243E 01  
Z = -0.5155C529E C7 ZC = -0.97540522E 04 RDOT = -0.31686530E 03 FLP = -0.30455288E 03 PSIV = 0.12545228E 03  
XL = -0.17C96E82BE C8 TAG = 0.60000000E 01 GLOAD = 0.27461853E 01 FLY = 0.95240916E 04 VA = 0.16290230E 05  
YL = -0.1C17C367E C8 RCLL = -0.18315315E 01 ACC = 0.80151883E 02 RTGN = -0.16521020E 02 FPAA = -0.11145434E 01  
ZL = -0.64921529E 07 RLDT = 0. DRAG = 0.23822399E 05 RTGL = 0.39045133E 03 PSAV = 0.12849842E 03

15 DEC. 1967 19 HR 28 MIN 20.60 SEC TMST 774229.0781 J.D. 2439840.3114 8 DAY 23 HR 3.8 MIN

X = -0.18451C09E 08 XC = 0.84118312E 04 ALT = 0.17946275E 06 LAT = -0.14368043E 02 VI = 0.17082035E 05  
Y = -0.88167346E 07 YC = -0.11420735E 05 R = 0.21100915E 08 LONG = 0.18969240E 03 FPAI = -0.79249233E 00  
Z = -0.52C32745E C7 ZC = -0.95186042E 04 RDOT = -0.23626435E 03 FLP = -0.30364692E 03 PSIV = 0.12534926E 03  
XL = -0.17C93118E 08 TAG = 0.60000000E 01 GLOAD = 0.27384123E 01 FLY = 0.94957599E 04 VA = 0.15889327E 05  
YL = -0.1C176601E 08 RCLL = -0.18315315E 01 ACC = 0.80078690E 02 RTGN = -0.16220708E 02 FPAA = -0.85198157E 00  
ZL = -0.64921529E C7 RLDT = C. DRAG = 0.23751534E 05 RTGL = 0.37734789E 03 PSAV = 0.12846211E 03

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15 DEC. 1967 19 HR 28 MIN 25.60 SEC TMST 774234.0781 J.D. 2439840.3114 8 DAY 23 HR 3.9 MIN

X = -0.184C9443E 08	XC = 0.82156368E 04	ALT = 0.178548COE 06	LAT = -0.14501261E 02	VI = 0.16684513E 05
Y = -0.88732CC0E 07	YC = -0.11165852E 05	R = 0.21099922E 08	LONG = 0.18986459E 03	FPAI = -0.55709156E 00
Z = -0.525028C9E 07	ZC = -0.92843981E 04	ROOT = -0.16222233E 03	FLP = -0.29866883E 03	PSIV = 0.12524430E 03
XL = -0.17089408E 08	TAG = 0.6000CC00E 01	GLOAD = 0.26943039E 01	FLY = 0.93400835E 04	VA = 0.15491388E 05
YL = -C.1C182831E 08	RCLL = -0.18315315E 01	ACC = 0.78927034E 02	RTGN = -0.15925725E 02	FPAAA = -0.59997796E 00
ZL = -0.64921929E 07	RLDOT = 0.	DRA.G = 0.23362145E 05	RTGL = 0.36456808E 03	PSAV = 0.12842673E 03

15 DEC. 1967 19 HR 28 MIN 30.60 SEC TMST 774239.0781 J.D. 2439840.3115 8 DAY 23 HR 4.0 MIN

X = -0.18368040E 08	XD = 0.80270579E 04	ALT = 0.17798100E 06	LAT = -0.14631042E 02	VI = 0.16295677E 05
Y = -0.89283559E C7	YC = -0.10914948E 05	R = 0.21099278E 08	LONG = 0.19003265E 03	FPAI = -0.34035344E-00
Z = -0.52961252E 07	ZC = -0.90542458E 04	ROOT = -0.96800452E 02	FLP = -0.28976257E 03	PSIV = 0.12513814E 03
XL = -0.17085693E 08	TAG = 0.60000C00E 01	GLOAD = 0.26145700E 01	FLY = 0.90615634E 04	VA = 0.15102126E 05
YL = -0.10189062E 08	RCLL = -0.18315315E 01	ACC = 0.76721560E 02	RTGN = -0.15630332E 02	FPAAA = -0.36725073E-00
ZL = -0.64921929E C7	RLDOT = 0.	DRA.G = 0.22665488E 05	RTGL = 0.35210881E 03	PSAV = 0.12839201E 03

15 DEC. 1967 19 HR 28 MIN 35.60 SEC TMST 774244.0781 J.D. 2439840.3115 8 DAY 23 HR 4.1 MIN

X = -0.18329154E C8	XC = 0.78496812E 04	ALT = 0.17771575E 06	LAT = -0.14757480E 02	VI = 0.15919976E 05
Y = -0.89823597E C7	YE = -0.10670183E 05	R = 0.21098937E 08	LONG = 0.19019669E 03	FPAI = -0.14894679E-00
Z = -0.53408238E C7	ZC = -0.88303641E 04	ROOT = -0.41385758E 02	FLP = -0.27813951E 03	PSIV = 0.12503152E 03
XL = -0.17081978E C8	TAG = 0.6000CC00E 01	GLOAD = 0.25102376E 01	FLY = 0.86980826E 04	VA = 0.14725991E 05
YL = -C.1C19529CE 08	RCLL = -0.18315315E 01	ACC = 0.73795807E 02	RTGN = -0.15330328E 02	FPAAA = -0.16102256E-00
ZL = -0.64921929E C7	RLDCT = 0.	DRA.G = 0.21756322E 05	RTGL = 0.33996102E 03	PSAV = 0.12835773E 03

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15 DEC. 1967 19 HR 28 MIN 40.60 SEC TMST 774249.0781 J.D. 2439840.3116 8 DAY 23 HR 4.2 MIN

X = -0.1829C321E C8 XC = 0.76858118E 04 ALT = 0.11769925E 06 LAT = -0.14880706E 02 VI = 0.15560365E 05  
Y = -C.9C351144E C7 YC = -0.10433022E 05 R = 0.21098847E 08 LONG = 0.19035684E 03 FPAI = 0.12288364E-01  
Z = -0.53844419E C7 ZC = -0.8614251CE 04 ROOT = 0.33372691E 01 FLP = -0.26486050E 03 PSIV = 0.12492502E 03  
XL = -0.17078259E 08 TAG = 0.6000C0C00E 01 GLOAD = 0.23907426E 01 FLY = 0.82828165E 04 VA = 0.14365940E 05  
YL = -0.1C2C1519E 08 ROLL = -0.18315315E 01 ACC = 0.70437279E 02 RTGN = -0.15021410E 02 FPAA = 0.13312039E-01  
ZL = -0.64921529E C7 RLCT = 0 DRAG = 0.20717626E 05 RTGL = 0.32811401E 03 PSAV = 0.12832370E 03

15 DEC. 1967 19 HR 28 MIN 45.60 SEC TMST 774254.0781 J.D. 2439840.3116 8 DAY 23 HR 4.2 MIN

X = -C.18252271E 08 XD = 0.75366901E 04 ALT = 0.17787775E 06 LAT = -0.15000864E 02 VI = 0.15218547E 05  
Y = -0.90867C41E C7 YC = -0.10204332E 05 R = 0.21098953E 08 LONG = 0.19051329E 03 FPAI = 0.14016402E-00  
Z = -C.5426695C7E 07 ZC = -0.84067882E 04 ROOT = 0.37229491E 02 FLP = -0.25078474E 03 PSIV = 0.12481915E 03  
XL = -0.17C74539E 08 TAG = 0.60000000E 01 GLOAD = 0.22639878E 01 FLY = 0.78426342E 04 VA = 0.14023675E 05  
YL = -0.1C2C7744E 08 ROLL = -0.18315315E 01 ACC = 0.66886644E 02 RTGN = -0.14701375E 02 FPAA = 0.15210746E-00  
ZL = -0.64921529E C7 RLCT = C DRAG = 0.19616607E 05 RTGL = 0.31655362E 03 PSAV = 0.12828976E 03

15 DEC. 1967 19 HR 28 MIN 50.60 SEC TMST 774259.0781 J.D. 2439840.3116 8 DAY 23 HR 4.3 MIN

X = -0.18214529E 08 XC = 0.74027134E 04 ALT = 0.17819775E 06 LAT = -0.15118108E 02 VI = 0.14895211E 05  
Y = -0.91371725E 07 YC = -0.99844901E C4 R = 0.21099201E 08 LONG = 0.19066622E 03 FPAI = 0.23292055E-00  
Z = -0.54685248E 07 ZC = -0.82083555E 04 ROOT = 0.60552298E 02 FLP = -0.23659078E 03 PSIV = 0.12471428E 03  
XL = -C.17C7CE15E 08 TAG = 0.60000000E 01 GLOAD = 0.21359864E 01 FLY = 0.73987554E 04 VA = 0.13699886E 05  
YL = -C.1C213569E 08 ROLL = -0.18315315E 01 ACC = 0.63326080E 02 RTGN = -0.14367866E 02 FPAA = 0.25324463E-00  
ZL = -C.64921529E C7 RLCT = 0 DRAG = 0.18506343E 05 RTGL = 0.30526586E 03 PSAV = 0.12825578E 03

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15 DEC. 1967 19 HR 28 MIN 55.60 SEC TMST 774264.0781 J.D. 2439840.3118 8 DAY 23 HR 4.4 MIN

X = -0.18178219E 08 XC = 0.72836322E 04 ALT = 0.17860850E 06 LAT = -0.15232603E 02 VI = 0.14590259E 05  
Y = -0.91865637E 07 YC = -0.9734871E 04 R = 0.21099542E 08 LONG = 0.19081582E 03 FPAI = 0.29001410E-00  
Z = -0.55C9C894E C7 ZC = -0.80189344E 04 RDCT = 0.73851211E 02 FLP = -0.22278916E 03 PSIV = 0.12461066E 03

XL = -0.17C67C91E 08 TAG = 0.6000C0000E 01 GLOAD = 0.20115313E 01 FLY = 0.69671459E 04 VA = 0.13394477E 05  
YL = -0.1C22C192E 08 RCLL = -0.18315315E 01 ACC = 0.59897857E 02 RTGN = -0.14020269E 02 FPAA = 0.31590649E-00  
ZL = -0.64921529E C7 DRAG = 0.17426768E 05 RTGL = 0.29423519E 03 PSAV = 0.12822169E 03

15 DEC. 1967 19 HR 29 MIN 0.73 SEC TMST 774269.2031 J.D. 2439840.3118 8 DAY 23 HR 4.5 MIN

X = -0.18141172E 08 XC = 0.71762759E 04 ALT = 0.17907175E 06 LAT = -0.15347268E 02 VI = 0.14296045E 05  
Y = -0.92361174E 07 YC = -0.95660651E 04 R = 0.21099934E 08 LONG = 0.19096592E 03 FPAI = 0.31197145E-00  
Z = -0.55497C79E 07 ZC = -0.78337972E 04 RDCT = 0.77840567E 02 FLP = -0.20945801E 03 PSIV = 0.12450592E 03  
XL = -0.17063270E 08 TAG = 0.6000C0000E 01 GLOAD = 0.18911608E 01 FLY = 0.65502492E 04 VA = 0.13099792E 05  
YL = -C.1C226569E 08 RCLL = -0.18315315E 01 ACC = 0.566621957E 02 RTGN = -0.13648543E 02 FPAA = 0.34046273E-00  
ZL = -0.64921529E 07 RLCT = 0. DRAG = 0.16383994E 05 RTGL = 0.28318083E 03 PSAV = 0.12818658E 03

15 DEC. 1967 19 HR 29 MIN 5.73 SEC TMST 774274.2031 J.D. 2439840.3119 8 DAY 23 HR 4.6 MIN

X = -0.18105524E 08 XC = 0.70847809E 04 ALT = 0.179521C0E 06 LAT = -0.15456665E 02 VI = 0.14025766E 05  
Y = -0.92834587E 07 YC = -0.93718040E 04 R = 0.21100315E 08 LONG = 0.19110937E 03 FPAI = 0.29899153E-00  
Z = -0.55884427E C7 ZC = -0.76614148E 04 RDCT = 0.73191535E 02 FLP = -0.19750760E 03 PSIV = 0.12440520E 03  
XL = -0.17055954E 08 TAG = 0.6000C0000E 01 GLOAD = 0.17832440E 01 FLY = 0.61765316E 04 VA = 0.12829051E 05  
YL = -C.1C232791E 08 RCLL = -0.18315315E 01 ACC = 0.53724666E 02 RTGN = -0.13271130E 02 FPAA = 0.32688431E-00  
ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.15449222E 05 RTGL = 0.27262757E 03 PSAV = 0.12815212E 03

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15 DEC. 1967 19 HR 29 MIN 10.73 SEC TMST 774279.2031 J.D. 2439840.3119 8 DAY 23 HR 4.7 MIN

X = -0.1807C304E 08 XC = 0.70050622E 04 ALT = 0.17992650E 06 LAT = -0.15563755E 02 VI = 0.13770616E 05  
Y = -0.93298476E 07 YC = -0.91848721E 04 R = 0.21100654E 08 LONG = 0.19125005E 03 FPAI = 0.25386020E-00  
Z = -0.56263344E 07 ZC = -0.74964721E 04 RDOT = 0.61013217E 02 FLP = -0.18678351E 03 PSIV = 0.12430588E 03  
XL = -0.17055808E 08 TAG = 0.60000000E 01 GLOAD = 0.16863008E 01 FLY = 0.58411638E 04 VA = 0.12573442E 05  
YL = -0.1C239CC9E 08 RCLL = -0.18315315E 01 ACC = 0.51158283E 02 RTGN = -0.12880192E 02 FPAA = 0.27803309E-00  
ZL = -0.64921529E 07 RLDCT = 0. CRAG = 0.146101374E 05 RTGL = 0.26228934E 03 PSAV = 0.12811748E 03

15 DEC. 1967 19 HR 29 MIN 15.73 SEC TMST 774284.2031 J.D. 2439840.3120 8 DAY 23 HR 4.7 MIN

X = -0.18035457E 08 XD = 0.69355696E 04 ALT = 0.18025325E 06 LAT = -0.15668664E 02 VI = 0.13528862E 05  
Y = -0.93753184E 07 YD = -0.90044465E 04 R = 0.21100914E 08 LONG = 0.19138811E 03 FPAI = 0.17905170E-00  
Z = -0.56634184E 07 ZD = -0.73381144E 04 RDOT = 0.42278258E 02 FLP = -0.17760853E 03 PSIV = 0.12420780E 03  
XL = -0.17052C73E 08 TAG = 0.60000000E 01 GLOAD = 0.16032604E 01 FLY = 0.55542402E 04 VA = 0.12331234E 05  
YL = -0.1C245229E 08 RCLL = -0.18315315E 01 ACC = 0.48987799E 02 RTGN = -0.12476294E 02 FPAA = 0.19604392E-00  
ZL = -0.64921529E 07 RLDCT = 0. CRAG = 0.13892698E 05 RTGL = 0.25215514E 03 PSAV = 0.12808268E 03

15 DEC. 1967 19 HR 29 MIN 20.73 SEC TMST 774289.2031 J.D. 2439840.3120 8 DAY 23 HR 4.8 MIN

X = -0.180CC934E 08 XC = 0.68746396E 04 ALT = 0.18047125E 06 LAT = -0.15771500E 02 VI = 0.13298621E 05  
Y = -0.94199C14E 07 YC = -0.88296362E 04 R = 0.21101067E 08 LONG = 0.19152369E 03 FPAI = 0.777417632E-01  
Z = -0.56997250E 07 ZC = -0.71854144E 04 RDOT = 0.17968998E 02 FLP = -0.16975153E 03 PSIV = 0.12411073E 03  
XL = -0.17048237E 08 TAG = 0.6C0000C00E 01 GLOAD = 0.15321428E 01 FLY = 0.53085333E 04 VA = 0.12100548E 05  
YL = -0.1C251444E 08 RCLL = -0.18315315E 01 ACC = 0.47148440E 02 RTGN = -0.12061432E 02 FPAA = 0.85084519E-01  
ZL = -0.64921529E 07 RLDCT = 0. CRAG = 0.13278117E 05 RTGL = 0.24221398E 03 PSAV = 0.12804777E 03

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15 DEC. 1967 19 HR 29 MIN 25.73 SEC TMST 774294.2031 J.D. 2439840.3121 8 DAY 23 HR 4.9 MIN

X = -C.17966698E 08 XC = 0.6820860E 04 ALT = 0.18055475E 06 LAT = -0.15872358E 02 VI = 0.13078298E 05  
Y = -0.94636229E 07 YC = -0.86596855E 04 R = 0.21101086E 08 LONG = 0.19165688E 03 FPAI = -0.48566060E-01  
Z = -0.57352806E C7 ZC = -0.70375847E C4 R001 = -0.11085658E 02 FLP = -0.16314401E 03 PSIV = 0.12401442E 03  
XL = -0.17044598E 08 TAC = 0.6000000E 01 GLOAD = 0.14722928E 01 FLY = 0.51019004E 04 VA = 0.11879793E 05  
YL = -0.10257660E 08 ROLL = -0.18315315E 01 ACC = 0.45610673E 02 RTGN = -0.11636375E 02 FPAA = -0.53464159E-01  
ZL = -0.64921529E C7 RLDCCT = 0. DRAG = 0.12761271E 05 RTGL = 0.23245779E 03 PSAV = 0.12801279E 03

15 DEC. 1967 19 HR 29 MIN 30.73 SEC TMST 774299.2031 J.D. 2439840.3121 8 DAY 23 HR 5.0 MIN

X = -0.17932716E 08 XC = 0.67728437E 04 ALT = 0.18048175E 06 LAT = -0.15971315E 02 VI = 0.12866320E 05  
Y = -0.95065C51E C7 YC = -0.84938556E C4 R = 0.21100950E 08 LONG = 0.19178780E 03 FPAI = -0.19635854E-00  
Z = -0.577C1C77E C7 ZC = -0.60938525E 04 R001 = -0.44094206E 02 FLP = -0.15775914E 03 PSIV = 0.12391861E 03  
XL = -0.17040857E 08 TAC = 0.6000000E 01 GLOAD = 0.14234423E 01 FLY = 0.49335029E 04 VA = 0.11667397E 05  
YL = -0.1C263873E C8 ROLL = -0.18315315E 01 ACC = 0.44355227E 02 RTGN = -0.11202865E 02 FPAA = -0.21653322E-00  
ZL = -0.64921529E C7 RLDCCT = 0. DRAG = 0.123400062E 05 RTGL = 0.222287839E 03 PSAV = 0.12797781E 03

15 DEC. 1967 19 HR 29 MIN 35.73 SEC TMST 774304.2031 J.D. 2439840.3123 8 DAY 23 HR 5.1 MIN

X = -0.17898962E 08 XC = 0.67292404E 04 ALT = 0.18023475E 06 LAT = -0.16068440E 02 VI = 0.12661159E 05  
Y = -0.95485671E C7 YC = -0.83314385E 04 R = 0.21100640E 08 LONG = 0.19191652E 03 FPAI = -0.36341814E-00  
Z = -0.58042247E 07 ZC = -0.67534740E 04 R001 = -0.80307207E 02 FLP = -0.15354428E 03 PSIV = 0.12382301E 03  
XL = -0.17C37113E 08 TAC = 0.6000000E 01 GLOAD = 0.13851644E 01 FLY = 0.48016942E 04 VA = 0.11461837E 05  
YL = -0.1C27CC86E 08 ROLL = -0.18315315E 01 ACC = 0.43360139E 02 RTGN = -0.10761670E 02 FPAA = -0.40144181E-00  
ZL = -0.64921529E C7 RLDCCT = 0. DRAG = 0.12010371E 05 RTGL = 0.21347017E 03 PSAV = 0.12794287E 03

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15 DEC. 1967 19 HR 29 MIN 40.73 SEC TMST 774309.2031 J.D. 2439840.3123 8 DAY 23 HR 5.2 MIN

X = -0.17865419E 08 XC = 0.66887302E 04 ALT = 0.17979925E 06 LAT = -0.16163788E 02 VI = 0.12461322E 05  
Y = -0.95898241E C7 YD = -0.8171754CE 04 R = 0.21100143E 08 LONG = 0.19204310E 03 FPAI = -0.54719035E 00  
Z = -0.58376468E C7 ZD = -0.66157300E 04 RDOT = -0.11900723E 03 FLP = -0.15057962E 03 PSIV = 0.12377272E 03  
XL = -0.17033267E 08 TAG = 0.60000000E 01 GLOAD = 0.13580362E 01 FLY = 0.47089823E 04 VA = 0.11261622E 05  
YL = -0.1C276258E C8 RCLL = -0.18315315E 01 ACC = 0.42628513E 02 RTGN = -0.10314533E 02 FPAA = -0.60548260E 00  
ZL = -0.64921929E 07 RLDCCT = 0. DRAG = 0.11778473E 05 RTGL = 0.20422786E 03 PSAV = 0.12790807E 03

15 DEC. 1967 19 HR 29 MIN 45.73 SEC TMST 774314.2031 J.D. 2439840.3124 8 DAY 23 HR 5.2 MIN

X = -0.17832C73E 08 XC = 0.66497614E 04 ALT = 0.17916475E 06 LAT = -0.16257394E 02 VI = 0.12265055E 05  
Y = -0.963C2E79E C7 YC = -0.80140233E 04 R = 0.21099447E 08 LONG = 0.19216759E 03 FPAI = -0.74457428E 00  
Z = -0.58703851E 07 ZD = -0.64797903E 04 RDOT = -0.15938325E 03 FLP = -0.14892055E 03 PSIV = 0.12363095E 03  
XL = -0.17025620E 08 TAG = 0.60000000E C1 GLOAD = 0.13427489E 01 FLY = 0.465170992E 04 VA = 0.11064997E 05  
YL = -0.1C2825C7E 08 RCLL = -0.18315315E 01 ACC = 0.42168016E 02 RTGN = -0.98630927E 01 FPAA = -0.82533017E 00  
ZL = -0.64921929E C7 RLDCCT = 0. DRAG = 0.11648699E 05 RTGL = 0.19514742E 03 PSAV = 0.12787350E 03

15 DEC. 1967 19 HR 29 MIN 50.73 SEC TMST 774319.2031 J.D. 2439840.3124 8 DAY 23 HR 5.3 MIN

X = -0.17798922E 08 XC = 0.66110436E 04 ALT = 0.17832500E 06 LAT = -0.16349288E 02 VI = 0.12070908E 05  
Y = -0.96699665E 07 YC = -0.78576181E 04 R = 0.21098547E 08 LONG = 0.19229001E 03 FPAI = -0.95296421E 00  
Z = -0.59024466E 07 ZD = -0.63449793E 04 RDOT = -0.20075846E 03 FLP = -0.14827029E 03 PSIV = 0.12353361E 03  
XL = -0.17C25869E 08 TAG = 0.60000000E 01 GLOAD = 0.13365522E 01 FLY = 0.46367640E 04 VA = 0.10870514E 05  
YL = -0.1C288716E 08 RCLL = -0.18315315E 01 ACC = 0.41910887E 02 RTGN = -0.94083223E 01 FPAA = -0.10582063E 01  
ZL = -0.64921929E C7 RLDCCT = 0.54999999E 01 DRAG = 0.11597835E 05 RTGL = 0.18622722E 03 PSAV = 0.12783926E 03

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15 DEC. 1967 19 HR 29 MIN 55.73 SEC TMST 774324.2031 J.D. 2439840.3125 8 DAY 23 HR 5.4 MIN

X = -0.17765659E 08	XD = 0.65737213E 04	ALT = 0.17727400E 06	LAT = -0.16439424E 02	VI = 0.11878718E 05
Y = -0.97088826E 07	YC = -0.77105018E 04	R = 0.21097437E 08	LCNG = 0.19241043E 03	FPAI = -0.11750657E 01
Z = -0.59238140E 07	ZC = -0.61998630E 04	ROOT = -0.24360077E 03	FLP = 0.55974554E 03	PSIV = 0.12336782E 03
XL = -0.17022117E 08	TAG = 0.60000000E 01	GLOAD = 0.11384238E 01	FLY = 0.46130174E 04	VA = 0.10676949E 05
YL = -C.10294922E 08	RCLL = 0.69184685E 01	ACC = 0.41931500E 02	RTGN = -0.91637493E 01	FPA = -0.13073477E 01
ZL = -0.64921929E 07	RLDCT = -0.4999999E 01	DRAG = 0.11617133E 05	RTGL = 0.17745459E 03	PSAV = 0.12773065E 03

15 DEC. 1967 19 HR 30 MIN 0.73 SEC TMST 774329.2031 J.D. 2439840.3125 8 DAY 23 HR 5.5 MIN

X = -0.17733192E 08	XD = 0.65329307E 04	ALT = 0.17601000E 06	LAT = -0.16527744E 02	VI = 0.11685758E 05
Y = -0.97470571E 07	YC = -0.75590134E 04	R = 0.21096115E 08	LONG = 0.19252888E 03	FPAI = -0.13991301E 01
Z = -0.59644658E 07	ZC = -0.60612764E 04	ROOT = -0.28533114E 03	FLP = 0.17702675E 03	PSIV = 0.12323759E 03
XL = -0.17018362E 08	TAG = 0.60000000E 01	GLOAD = 0.13472293E 01	FLY = 0.46752007E 04	VA = 0.10483226E 05
YL = -C.1C301129E 08	RCLL = 0.21684685E 01	ACC = 0.41908262E 02	RTGN = -0.87967875E 01	FPA = -0.15596600E 01
ZL = -0.64921929E 07	RLDCT = 0.	DRAG = 0.11696378E 05	RTGL = 0.16884666E 03	PSAV = 0.12766404E 03

15 DEC. 1967 19 HR 30 MIN 5.73 SEC TMST 774334.2031 J.D. 2439840.3126 8 DAY 23 HR 5.6 MIN

X = -0.17700633E 08	XD = 0.64901978E 04	ALT = 0.17453700E 06	LAT = -0.16614284E 02	VI = 0.11491608E 05
Y = -0.97844797E 07	YC = -0.74112633E 04	R = 0.21094584E 08	LONG = 0.19264533E 03	FPAI = -0.16306342E 01
Z = -0.59944158E 07	ZC = -0.59167183E 04	ROOT = -0.32700626E 03	FLP = 0.53566509E 03	PSIV = 0.12307022E 03
XL = -0.170146C6E 08	TAG = 0.60000000E 01	GLOAD = 0.13704331E 01	FLY = 0.47307334E 04	VA = 0.10287785E 05
YL = -C.1C3C7332E 08	RCLL = 0.64601326E 01	ACC = 0.42394805E 02	RTGN = -0.85251650E 01	FPA = -0.18215013E 01
ZL = -C.64921929E 07	RLDCT = -0.4999999E 01	DRAG = 0.11902410E 05	RTGL = 0.16039240E 03	PSAV = 0.12755905E 03

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15 DEC. 1967 19 HR 30 MIN 10.73 SEC TMSI 774339.2031 J.D. 2439840.3126 8 DAY 23 HR 5.7 MIN

X = -0.17668202E 08 XC = 0.64415469E C4 ALT = 0.17285925E 06 LAT = -0.16698996E 02 VI = 0.11293748E 05  
Y = -0.98211546E 07 YC = -0.72581851E 04 R = 0.21092850E 08 LONG = 0.19275975E 03 FPAI = -0.18592390E 01  
Z = -C.6C236496E C7 ZC = -0.57770214E 04 RDOT = -0.36641602E 03 FLP = 0.14146955E 03 PSIV = 0.12293626E 03  
XL = -0.17C1C846E 08 TAG = 0.6C000CCCE 01 GLOAD = 0.13982731E 01 FLY = 0.48567308E 04 VA = 0.10089219E 05  
YL = -0.1C313536E 08 RCIL = 0.16684685E 01 ACC = 0.42823967E 02 RTGN = -0.81477009E 01 FPAA = -0.20812986E 01  
ZL = -0.64921529E C7 RLCT = 0.54999999E 01 DRAG = 0.12146977E 05 RTGL = 0.15210524E 03 PSAV = 0.12749547E 03

15 DEC. 1967 19 HR 30 MIN 15.73 SEC TMSI 774344.2031 J.D. 2439840.3127 8 DAY 23 HR 5.7 MIN

X = -0.17636222E 08 XC = 0.63890352E 04 ALT = 0.17098550E 06 LAT = -0.16781873E 02 VI = 0.11092517E 05  
Y = -0.9857C732E 07 YC = -0.71088611E 04 R = 0.21090920E 08 LONG = 0.19287209E 03 FPAI = -0.20911913E 01  
Z = -0.60521656E C7 ZC = -0.56292324E 04 RDOT = -0.40476672E 03 FLP = 0.12746796E 03 PSIV = 0.12215520E 03  
XL = -C.17CC7C85E 08 TAG = 0.6000CC000E 01 GLOAD = 0.14388034E 01 FLY = 0.50007597E 04 VA = 0.98866088E 04  
YL = -C.1C31536E 08 RCIL = 0.14601326E 01 ACC = 0.43649314E 02 RTGN = -0.78015601E 01 FPAA = -0.23463953E 01  
ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.12505960E 05 RTGL = 0.14397583E 03 PSAV = 0.12738369E 03

15 DEC. 1967 19 HR 30 MIN 20.73 SEC TMSI 774349.2031 J.D. 2439840.3127 8 DAY 23 HR 5.8 MIN

X = -0.176C4428E 08 XC = 0.63279396E C4 ALT = 0.16892900E 06 LAT = -0.16862869E 02 VI = 0.10864394E 05  
Y = -0.98922281E C7 YC = -0.69541821E 04 R = 0.21088809E 08 LONG = 0.19298228E 03 FPAI = -0.23143558E 01  
Z = -0.60795529E C7 ZC = -0.54832986E 04 RDOT = -0.43953517E 03 FLP = 0.11102502E 04 PSIV = 0.12259608E 03  
XL = -0.17C02321E 08 TAG = C.60000000E 01 GLOAD = 0.14896483E 01 FLC = 0.50594733E 04 VA = 0.96775176E 04  
YL = -0.1C325537E 08 RCIL = 0.12376801E 02 ACC = 0.44994210E 02 RTGN = -0.75440044E 01 FPAA = -0.26031635E 01  
ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.12949644E 05 RTGL = 0.13601907E 03 PSAV = 0.12730277E 03

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15 DEC. 1967 19 HR 30 MIN 25.73 SEC TMST 774354.2031 J.D. 2439840.3127 8 DAY 23 HR 5.9 MIN

X = -0.17572554E 08	XD = 0.62592443E 04	ALT = 0.16670275E 06	LAT = -0.16941899E 02	VI = 0.10669406E 05
Y = -0.99266176E 07	YD = -0.67991701E 04	R = 0.21086529E 08	LONG = 0.19309027E 03	FPAI = -0.25319229E 01
Z = -0.61065854E 07	ZD = -0.53319201E 04	ROOL = -0.47133181E 03	FLP = 0.20392409E 03	PSIV = 0.12241213E 03
XL = -0.16995555E 08	TAG = 0.60000000E 01	GLOAD = 0.15492329E 01	FLY = 0.53855479E 04	VA = 0.94612473E 04
YL = -0.1C332135E 08	RCLL = 0.21684685E 01	ACC = 0.46075394E 02	RTGN = -0.72530681E 01	FPAI = -0.28554886E 01
ZL = -0.64921929E 07	RLDCY = C.	DRAG = 0.13473519E 05	RTGL = 0.12823337E 03	PSAV = 0.12720090E 03

15 DEC. 1967 19 HR 30 MIN 30.73 SEC TMST 774359.2031 J.D. 2439840.3129 8 DAY 23 HR 6.0 MIN

X = -0.17541850E 08	XD = 0.61814006E 04	ALT = 0.16432725E 06	LAT = -0.17018934E 02	VI = 0.10445936E 05
Y = -0.99602202E 07	YD = -0.66430991E 04	R = 0.21084102E 08	LONG = 0.19319593E 03	FPAI = -0.27401438E 01
Z = -0.61332551E 07	ZD = -0.51746593E 04	ROOL = -0.49938157E 03	FLP = 0.67978288E 03	PSIV = 0.12220232E 03
XL = -0.16995787E 08	TAG = 0.60000000E 01	GLOAD = 0.16123948E 01	FLY = 0.55684131E 04	VA = 0.92361691E 04
YL = -0.1C338334E 08	RCLL = 0.69601326E 01	ACC = 0.47635297E 02	RTGN = -0.69999397E 01	FPAI = -0.30993793E 01
ZL = -0.64921929E 07	RLDCY = -0.49999999E 01	DRAG = 0.14024383E 05	RTGL = 0.120662645E 03	PSAV = 0.12707822E 03

15 DEC. 1967 19 HR 30 MIN 35.73 SEC TMST 774364.2031 J.D. 2439840.3129 8 DAY 23 HR 6.1 MIN

X = -0.17511162E 08	XD = 0.60923817E 04	ALT = 0.16182200E 06	LAT = -0.17093877E 02	VI = 0.10212752E 05
Y = -0.99930299E 07	YD = -0.648131C9E 04	R = 0.21081545E 08	LONG = 0.19329918E 03	FPAI = -0.29325946E 01
Z = -0.61587453E 07	ZD = -0.50175485E 04	ROOL = -0.52249547E 03	FLP = 0.12583336E 04	PSIV = 0.12200779E 03
XL = -0.16992C17E 08	TAG = 0.60000000E 01	GLOAD = 0.16867534E 01	FLY = 0.57342977E 04	VA = 0.90016875E 04
YL = -0.1C344529E 08	RCLL = 0.12376801E 02	ACC = 0.49578562E 02	RTGN = -0.66975791E 01	FPAI = -0.33275537E 01
ZL = -0.64921929E 07	RLDCY = -0.49999999E 00	DRAG = 0.14676847E 05	RTGL = 0.11320990E 03	PSAV = 0.12698248E 03

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15 DEC. 1967 19 HR 30 MIN 40.73 SEC TMST 774369.2031 J.D. 2439840.3130 8 DAY 23 HR 6.2 MIN

X = -C.1748CS42E 08 XC = 0.59927862E 04 ALT = 0.15920975E 06 LAT = -0.17166634E 02 VI = 0.99696201E 04  
Y = -0.1CC25C33F 08 YC = -C.63171680E 04 R = 0.21078883E 08 LONG = 0.19339991E 03 FPAI = -0.31118248E 01  
Z = -0.618342C9E C7 ZC = -0.48552271E 04 RDOT = -0.54111974E 03 FLP = 0.17842689E 03 PSIV = 0.12179267E 03  
XL = -0.16988243E 08 TAG = C.60000000E 01 GLOAD = 0.17600430E 01 FLY = 0.61254971E 04 VA = 0.87570206E 04  
YL = -0.1C35C724E 08 RCLL = 0.16684685E 01 ACC = 0.51117923E 02 RTGN = -0.64209361E 01 FPAA = -0.35432383E 01  
ZL = -0.64921929E 07 RLCT = 0.54999999E 01 DRAG = 0.15320238E 05 RTGL = 0.10598806E 03 PSAV = 0.12687442E 03

15 DEC. 1967 19 HR 30 MIN 45.73 SEC TMST 774374.2031 J.D. 2439840.3130 8 DAY 23 HR 6.2 MIN

X = -0.17451250E 08 XD = 0.58824108E 04 ALT = 0.15651475E 06 LAT = -0.17237152E 02 VI = 0.97161122E 04  
Y = -C.1CC562CGE 08 YC = -0.61524299E 04 R = 0.21076140E 08 LONG = 0.19349797E 03 FPAI = -0.32768677E 01  
Z = -0.62C72724E C7 ZC = -C.46848358E 04 RDOT = -0.55538228E 03 FLP = 0.21865346E 03 PSIV = 0.12153516E 03  
XL = -0.16584468E 08 TAG = C.6C0C000CE 01 GLOAD = 0.18360575E 01 FLY = 0.63888535E 04 VA = 0.85014116E 04  
YL = -C.1C356919E 08 RCLL = 0.19601326E C1 ACC = 0.53042176E 02 RTGN = -0.62009025E 01 FPAA = -0.37456971E 01  
ZL = -0.64921929E C7 RLCT = 0. DRAG = 0.15981485E 05 RTGL = 0.98967084E 02 PSAV = 0.12673054E 03

15 DEC. 1967 19 HR 30 MIN 5C.73 SEC TMST 774379.2031 J.D. 2439840.3131 8 DAY 23 HR 6.3 MIN

X = -C.17422141E 08 XC = 0.57594719E 04 ALT = 0.15376175E 06 LAT = -0.17305337E 02 VI = 0.94510615E 04  
Y = -C.1C0B6541E 08 YC = -0.59822687E 04 R = -0.21073340E 08 LONG = 0.19359324E 03 FPAI = -0.34217591E 01  
Z = -0.623C2772E C7 ZC = -0.45125946E C4 RDOT = -0.56409103E 03 FLP = 0.14147902E 04 PSIV = 0.12127926E 03  
XL = -0.1698C691E 08 TAG = 0.6C0C000CE 01 GLCAC = 0.19268399E 01 FLY = 0.65611422E 04 VA = 0.82343722E 04  
YL = -C.1C363109E 08 RCLL = C.12168465E 02 ACC = 0.55683184E 02 RTGN = -0.59548951E 01 FPAA = -0.392280896E 01  
ZL = -C.64921929E C7 RLCT = -C.49999999E 01 DRAG = 0.16779865E 05 RTGL = 0.92160526E 02 PSAV = 0.12660287E 03

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15 DEC. 1967 19 HR 30 MIN 55.73 SEC TMSI 774384.2031 J.D. 2439840.3131 8 DAY 23 HR 6.4 MIN

X = -0.17393679E 08 XC = 0.56233381E 04 ALT = 0.15097725E 06 LAT = -0.17371066E 02 VI = 0.91735776E 04

Y = -0.1C116C18E 08 YC = -0.58081077E 04 R = 0.21070510E 08 LONG = 0.19368560E 03 FPAI = -0.35436029E 01

Z = -0.62524CC4E C7 ZC = -0.43357214E C4 RDOT = -0.56700155E 03 FLP = 0.15044802E 04 PSIV = 0.12100506E 03

XL = -0.16976911E 08 TAG = 0.6000C0C0E 01 GLOAD = 0.20142457E 01 FLY = 0.68560016E 04 VA = 0.7957131E 04

YL = -0.1C369301E 08 RCLL = 0.12376801E 02 ACC = 0.57986281E 02 RTGN = -0.57182116E 01 FPAA = -0.40874319E 01

ZL = -0.64921629E 07 RLDCIT = 0.17547731E 05 DRAG = 0.85576679E 02 RTGL = 0.12647118E 03 PSAV = 0.12633552E 03

15 DEC. 1967 19 HR 31 MIN 0.73 SEC TMSI 774389.2231 J.D. 2439840.3132 8 DAY 23 HR 6.5 MIN

X = -0.17365628E 08 XC = 0.54740186E 04 ALI = 0.14818925E 06 LAT = -0.17434243E 02 VI = 0.88834309E 04

Y = -0.1C144E21E 08 YC = -0.56296855E 04 R = 0.21067678E 08 LONG = 0.19377489E 03 FPAI = -0.36421300E 01

Z = -0.62736114E 07 ZC = -0.41541671E 04 RDOT = -0.56431425E 03 FLP = 0.27623722E 03 PSIV = 0.12071053E 03

XL = -0.16973130E 08 TAG = 0.6000CC00E 01 GLOAD = 0.20954255E 01 FLY = 0.72953069E 04 VA = 0.766621857E 00

YL = -0.1C375489E 09 ROLL = 0.21684685E 01 ACC = 0.59915287E 02 RTGN = -0.54915692E 01 FPAA = -0.42236131E 01

ZL = -0.64921529E 07 RLDCIT = 0.49999999E 01 DRAG = 0.18251337E 05 RTGL = 0.79225001E 02 PSAV = 0.12633552E 03

15 DEC. 1967 19 HR 31 MIN 5.73 SEC TMSI 774394.2031 J.D. 2439840.3132 8 DAY 23 HR 6.6 MIN

X = -0.17338554E 08 XC = 0.53135591E 04 ALT = 0.14542575E 06 LAT = -0.17494800E 02 VI = 0.85824540E 04

Y = -0.1C17223E 08 YC = -0.54503791E 04 R = 0.21064872E 08 LCONG = 0.19386095E 03 FPAI = -0.37219510E 01

Z = -0.62939156E C7 ZD = -0.39645902E 04 RDOT = -0.55712675E 03 FLP = 0.25946911E 03 PSIV = 0.12036076E 03

XL = -0.16969345E 08 TAG = 0.6000CC000E 01 GLOAD = 0.21768561E 01 FLP = 0.75814493E 04 VA = 0.73581097E 04

YL = -0.1C381678E 08 RCLL = 0.19601326E 01 ACC = 0.62156500E 02 RTGN = -0.53142615E 01 FPAA = -0.43423619E 01

ZL = -0.64921529E C7 RLDCIT = 0.18964720E 05 DRAG = 0.73112999E 02 RTGL = 0.73112999E 02 PSAV = 0.12615671E 03

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15 DEC. 1967 19 HR 31 MIN 10.73 SEC TMST 774399.2031 J.D. 2439840.3134 8 DAY 23 HR 6.7 MIN

X = -0.17312811E 08 XC = 0.51427722E 04 ALT = 0.14270850E 06 LAT = -0.17552639E 02 VI = 0.82719149E 04  
Y = -C.1C199113E 08 YC = -C.52674628E C4 R = 0.21062115E 08 LONG = 0.19394367E 03 FPAI = -0.37836387E 01  
Z = -0.63132672E 07 ZC = -0.37723082E 04 RDOT = -0.54585512E 03 FLP = 0.94580871E 03 PSIV = 0.1198943E 03  
XL = -0.16965559E C8 TAG = 0.60000000E 01 GLOAD = 0.22391921E 01 FLY = 0.77475526E 04 VA = 0.70442769E 04  
YL = -C.1C387863E 08 RCLL = 0.69601326E 01 ACC = 0.63985334E 02 RTGN = -0.51357243E 01 FPAA = -0.44442538E 01  
ZL = -0.64921529E C7 RLCT = -0.49999999E 01 DRAG = 0.19512677E 05 RTGL = 0.67252004E 02 PSAV = 0.12597531E 03

15 DEC. 1967 19 HR 31 MIN 15.73 SEC TMST 774404.2031 J.D. 2439840.3134 8 DAY 23 HR 6.7 MIN

X = -0.17287546E 08 XC = 0.49629505E 04 ALT = 0.14005252E 06 LAT = -0.17607687E 02 VI = 0.79533187E 04  
Y = -C.1C224578E 08 YC = -0.50806591E 04 R = 0.21059423E 08 LONG = 0.19402294E 03 FPAI = -0.38289613E 01  
Z = -0.63316557E 07 ZC = -0.35792882E 04 RDOT = -0.53110870E 03 FLP = 0.16735091E 04 PSIV = 0.11960536E 03  
XL = -0.16961770E 08 TAG = 0.60000000E 01 GLOAD = 0.22783364E 01 FLY = 0.77609608E 04 VA = 0.6723392E 04  
YL = -0.1C394C49E C8 RCLL = 0.12168465E 02 ACC = 0.65250107E 02 RTGN = -0.49446357E 01 FPAA = -0.45314608E 01  
ZL = -0.64921929E 07 RLCT = -0.49999999E 01 DRAG = 0.19849354E 05 RTGL = 0.61650887E 02 PSAV = 0.12580381E 03

15 DEC. 1967 19 HR 31 MIN 20.73 SEC TMST 774409.2031 J.D. 2439840.3135 8 DAY 23 HR 6.8 MIN

X = -0.17263194E 08 XC = 0.47769294E 04 ALT = 0.13747750E 06 LAT = -0.17659908E 02 VI = 0.76296264E 04  
Y = -0.1C245508E 08 YC = -0.48914566E 04 R = -0.21056809E 08 LONG = 0.19409867E 03 FPAI = -0.38651092E 01  
Z = -0.6349C704E C7 ZC = -0.33861184E 04 RDOT = -0.51429578E 03 FLP = 0.17280759E 04 PSIV = 0.11920276E 03  
XL = -0.1695758CE C8 TAG = 0.60000000E 01 GLCAD = 0.23131828E 01 FLY = 0.78749399E 04 VA = 0.63951887E 04  
YL = -0.1C4CC232E C8 RCLL = 0.12376801E 02 ACC = 0.661199359E 02 RTGN = -0.47483728E 01 FPAA = -0.46126564E 01  
ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.20155788E 05 RTGL = 0.56313676E 02 PSAV = 0.12563663E 03

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15 DEC. 1967 19 HR 31 MIN 25.73 SEC TMST 774414.2031 J.D. 2439840.3135 8 DAY 23 HR 6.9 MIN  
~~X~~ = -0.17235779E 08 ~~XC~~ = 0.45882403E 04 ~~ALT~~ = 0.13498225E 06 ~~LAT~~ = -0.17709278E 02 ~~VI~~ = 0.73042761E 04  
~~Y~~ = -0.1C2738898E 08 ~~YC~~ = -0.47021228E 04 ~~R~~ = 0.21054278E 08 ~~LONG~~ = 0.19417080E 03 ~~FPAI~~ = -0.39040985E 01  
~~Z~~ = -0.63655C74E 07 ~~ZC~~ = -0.31922628E 04 ~~RDOT~~ = -0.49732374E 03 ~~FLP~~ = 0.10380992E 06 ~~PSIV~~ = 0.11876446E 03  
~~XL~~ = -0.16954186E 08 ~~TAG~~ = 0.6000C0000E 01 ~~GLOAD~~ = 0.23192578E 01 ~~FLY~~ = 0.80183343E 04 ~~VA~~ = 0.60660338E 04  
~~YL~~ = -0.10406415E 08 ~~RCLL~~ = 0.73768005E 01 ~~ACC~~ = 0.66154969E 02 ~~RTGN~~ = -0.45615363E 01 ~~FPAIA~~ = -0.47026697E 01  
~~ZL~~ = -0.64921529E 07 ~~RLCT~~ = 0.49999999E 01 ~~DRAG~~ = 0.20213136E 05 ~~RTGL~~ = 0.51242988E 02 ~~PSAV~~ = 0.12545378E 03

15 DEC. 1967 19 HR 31 MIN 30.73 SEC TMST 774419.2031 J.D. 2439840.3136 8 DAY 23 HR 7.0 MIN  
~~X~~ = -0.172173C9E 08 ~~XC~~ = 0.43996086E 04 ~~ALT~~ = 0.13256800E 06 ~~LAT~~ = -0.17755798E 02 ~~VI~~ = 0.69800422E 04  
~~Y~~ = -0.1C296546E 08 ~~YC~~ = -0.45166269E 04 ~~R~~ = 0.21051831E 08 ~~LONG~~ = 0.19423930E 03 ~~FPAI~~ = -0.39563256E 01  
~~Z~~ = -0.63809102E 07 ~~ZC~~ = -0.29939921E 04 ~~RDOT~~ = -0.48159533E 03 ~~FLP~~ = 0.17218039E 04 ~~PSIV~~ = 0.118224118E 03  
~~XL~~ = -0.1695C392E 08 ~~TAG~~ = 0.60000000E 01 ~~GLOAD~~ = 0.23048956E 01 ~~FLY~~ = 0.78463578E 04 ~~VA~~ = 0.57369560E 04  
~~YL~~ = -0.1C412595E 08 ~~RCLL~~ = 0.12376601E 02 ~~ACC~~ = 0.658881363E 02 ~~RTGN~~ = -0.44197823E 01 ~~FPAIA~~ = -0.48154233E 01  
~~ZL~~ = -0.64921529E 07 ~~RLCT~~ = 0.49999999E 01 ~~DRAG~~ = 0.20082632E 05 ~~RTGL~~ = 0.46435504E 02 ~~PSAV~~ = 0.12519607E 03

15 DEC. 1967 19 HR 31 MIN 35.73 SEC TMST 774424.2031 J.D. 2439840.3136 8 DAY 23 HR 7.1 MIN  
~~X~~ = -0.17195761E 08 ~~XC~~ = 0.422158C9E 04 ~~ALT~~ = 0.13021075E 06 ~~LAT~~ = -0.17793333E 02 ~~VI~~ = 0.66631310E 04  
~~Y~~ = -0.10319C94E 08 ~~YC~~ = -0.43446425E 04 ~~R~~ = 0.21062443E 08 ~~LONG~~ = 0.19430432E 03 ~~FPAI~~ = -0.40944952E 01  
~~Z~~ = -0.63954C28E 07 ~~ZC~~ = -0.27748248E 04 ~~RDOT~~ = -0.47515830E 03 ~~FLP~~ = 0.36325554E 04 ~~PSIV~~ = 0.11745520E 03  
~~XL~~ = -0.1694C593E 08 ~~TAG~~ = 0.60000000E 01 ~~GLOAD~~ = 0.22819952E 01 ~~FLY~~ = 0.7077660E 04 ~~VA~~ = 0.54117267E 04  
~~YL~~ = -0.C1C418715E 08 ~~RCLL~~ = 0.27168468E 02 ~~ACC~~ = 0.66282322E 02 ~~RTGN~~ = -0.44495471E 01 ~~FPAIA~~ = -0.50435218E 01  
~~ZL~~ = -0.64921529E 07 ~~RLCT~~ = 0.49779375E 01 ~~DRAG~~ = 0.198881790E 05 ~~RTGL~~ = 0.41876037E 02 ~~PSAV~~ = 0.12464017E 03

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15 DEC. 1967 19 HR 31 MIN 40.73 SEC TMSI 774429.2031 J.D. 2439840.3137 8 DAY 23 HR 7.2 MIN

X = -0.17175C70E 08	Y = 0.40577733E 04	Z = 0.12784525E 06	ALT = 0.21047049E 08	LONG = 0.19436608E 03	FPAI = -0.17839597E 02	V1 = 0.63548620E 04
X = -0.1C340406E 08	Y = -0.41811456E 04	Z = -0.25370787E 04	RDOT = -0.48455705E 03	FLP = 0.50478681E 04	PSIV = 0.11641100E 03	
XL = -0.64086879E 07	ZD = -0.60000000E 01	GLOAD = 0.22372162E 01	TAG = 0.663511928E 02	FLY = 0.59497303E 04	VA = 0.50920388E 04	
ML = -0.16942194E 08	YL = -0.403111928E 02	ACC = 0.66351641E 02	RTGN = -0.46175209E 01	FPAI = -0.54605091E 01		
ZL = -0.64921929E 07	RLDOT = 0.	DRAG = 0.19506451E 05	RTGL = 0.37558466E 02	PSAV = 0.12378142E 03		

15 DEC. 1967 19 HR 31 MIN 45.73 SEC TMSI 774434.2031 J.D. 2439840.3137 8 DAY 23 HR 7.2 MIN

X = -0.17155162E 08	XC = 0.39070993E 04	ALT = 0.12539700E 06	LAT = -0.17876450E 02	V1 = 0.60551379E 04	
Y = -0.1036C909E 08	YC = -0.40200876E 04	R = 0.21044575E 08	LONG = 0.19442476E 03	FPAI = -0.48077197E 01	
Z = -0.64207560E 07	ZD = -0.22887042E 04	RDOT = -0.50749385E 03	FLP = 0.567923563E 04	PSIV = 0.11516645E 03	
XL = -0.16938991E 08	YL = 0.60000000E 01	GLOAD = 0.220883037E 01	TAG = 0.52010886E 04	FLY = 0.52010886E 04	VA = 0.47789694E 04
YL = -0.1C431130E 08	RCLL = 0.47516907E 02	ACC = 0.66372226E 02	RTGN = -0.48562471E 01	FPAI = -0.60959088E 01	
ZL = -0.64921929E 07	RLDOT = 0.36439127E 01	DRAG = 0.19252664E 05	RTGL = 0.33480513E 02	PSAV = 0.12268124E 03	

15 DEC. 1967 19 HR 31 MIN 50.73 SEC TMSI 774439.2031 J.D. 2439840.3138 8 DAY 23 HR 7.3 MIN

X = -0.17135977E 08	XC = 0.37690619E 04	ALT = 0.12279600E 06	LAT = -0.17909826E 02	V1 = 0.57640611E 04	
Y = -0.1C380465E 08	YC = -0.38579654E 04	R = 0.21041950E 08	LONG = 0.19448046E 03	FPAI = -0.54221038E 01	
Z = -0.64315638E 07	ZD = -0.20333903E 04	RDOT = -0.54465984E 03	FLP = 0.64887721E 04	PSIV = 0.11374312E 03	
XL = -0.16935169E 08	TAG = 0.60000000E 01	GLOAD = 0.21770720E 01	FLY = 0.39498024E 04	VA = 0.44733767E 04	
YL = -0.1C437364E 08	ROLL = 0.58670563E 02	ACC = 0.66867566E 02	RTGN = -0.51354681E 01	FPAI = -0.69934426E 01	
ZL = -0.64921929E 07	RLDOT = 0.	DRAG = 0.18990969E 05	RTGL = 0.29636290E 02	PSAV = 0.12135626E 03	

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15 DEC. 1967 19 HR 31 MIN 55.73 SEC TMST 774444.2031 J.D. 2439840.3138 8 DAY 23 HR 7.4 MIN

X	= -0.17117459E 08	XD	= 0.36357357E 04	ALT	= 0.11997775E 06	LAT	= -0.17939705E 02	VI	= 0.54792908E 04
Y	* -0.10399682E 08	YC	= 0.36930367E 04	R	= 0.21039111E 08	LONG	= 0.19453320E 03	FPAI	= -0.61594458E 01
Z	* -0.64410846E 07	ZC	= -0.17791949E 04	RDOT	= -0.58790413E 03	FLP	= 0.53309239E 04	PSIV	= 0.11219601E 03
XL	= -0.16931381E 08	TAG	= 0.6000CC00E 01	GLOAD	= 0.21492406E 01	FLY	= 0.52764404E 04	VA	= 0.41739708E 04
YL	= -0.10443479E 08	RCLL	= 0.45294289E 02	ACC	= 0.63538716E 02	RIGN	= -0.54132382E 01	FPAA	= -0.80970346E 01
ZL	* -0.64921929E 07	RLDCT	= -0.16500000E 02	DRAG	= 0.18751595E 05	RTGL	= 0.26025100E 02	PSAV	= 0.11986907E 03

16 DEC. 1967 19 HR 32 MIN 0.73 SEC TMST 774449.2031 J.D. 2439840.3138 8 DAY 23 HR 7.5 MIN

X	= -0.17099708E 08	XD	= 0.34645501E 04	ALT	= 0.11707125E 06	LAT	= -0.17966680E 02	VI	= 0.51857092E 04
Y	* -0.10417493E 08	YC	= -0.34922327E 04	R	= 0.21036185E 08	LONG	= 0.19458273E 03	FPAI	= -0.64629537E 01
Z	* -0.649495659E 07	ZC	= -0.16409704E 04	RDOT	= -0.58370741E 03	FLP	= -0.58313124E 04	PSIV	= 0.11178139E 03
XL	= -0.16927571E 08	TAG	= 0.60000000E 01	GLOAD	= 0.21326353E 01	FLY	= 0.46250401E 04	VA	= 0.38795129E 04
YL	= -0.10449653E 08	RCLL	= -0.51580704E 02	ACC	= 0.63173983E 02	RIGN	= -0.51496589E 01	FPAA	= -0.86535166E 01
ZL	* -0.64921929E 07	RLDCT	= -0.20000000E 02	DRAG	= 0.18606989E 05	RTGL	= 0.22762394E 02	PSAV	= 0.11990237E 03

15 DEC. 1967 19 HR 32 MIN 5.73 SEC TMST 774454.2031 J.D. 2439840.3140 8 DAY 23 HR 7.6 MIN

X	= -0.17082676E 08	XD	= 0.33560122E 04	ALT	= 0.11398350E 06	LAT	= -0.17992494E 02	VI	= 0.48761929E 04
Y	= -0.1C434184E 08	YC	= -0.31768666E 04	R	= 0.21033079E 08	LONG	= 0.19462800E 03	FPAI	= -0.78939748E 01
Z	* -0.64575834E 07	ZC	= -0.15625194E 04	RDOT	= -0.66997289E 03	FLP	= -0.73763444E 04	PSIV	= 0.11261342E 03
XL	= -0.16923761E 08	TAG	= 0.60000000E 01	GLOAD	= 0.21151867E 01	FLY	= -0.41206276E 03	VA	= 0.35924456E 04
YL	= -0.1C455823E 08	RCLL	= -0.93197376E 02	ACC	= 0.70083152E 02	RIGN	= -0.43857143E 01	FPAA	= -0.10748295E 02
ZL	* -0.64921929E 07	RLDCT	= -0.45575188E 01	DRAG	= 0.18469613E 05	RTGL	= 0.19856533E 02	PSAV	= 0.12176370E 03

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15 DEC. 1967 19 HR 32 MIN 10.73 SEC TMST 774459.2031 J.D. 2439840.3140 8 DAY 23 HR 7.7 MIN

X = -0.17066133E 08 XC = 0.32614517E 04 ALT = 0.11037975E 06 LAT = -0.18017507E 02 VI = 0.4572211E 04  
Y = -0.10449252E 08 YC = -0.28498885E 04 R = 0.21029457E 08 LONG = 0.19466862E 03 FPAI = -0.98266059E 01  
Z = -0.646516C7E 07 ZC = -0.14649858E 04 RDOT = -0.78032585E 03 FLP = -0.70964654E 04 PSIV = 0.11343397E 03  
XL = -0.16919947E 08 TAG = 0.60000000E 01 GLOAD = 0.21324909E 01 FLY = -0.22843172E 04 VA = 0.33122371E 04  
YL = -0.1C461593E 08 ROLL = -0.10784311E 03 ACC = 0.71857211E 02 RTGN = -0.36695364E 01 FPAA = -0.13626321E 02  
ZL = -0.64921529E 07 RLCT = 0. DRAG = 0.18637651E 05 RTGL = 0.17196593E 02 PSAV = 0.12382002E 03

15 DEC. 1967 19 HR 32 MIN 15.73 SEC TMST 774464.2031 J.D. 2439840.3141 8 DAY 23 HR 7.7 MIN

X = -0.1705CC61E 08 XC = 0.31680670E 04 ALT = 0.10619750E 06 LAT = -0.18041468E 02 VI = 0.42643198E 04  
Y = -0.1C462679E 08 YC = -0.252C0927E 04 R = 0.21025258E 08 LONG = 0.19470456E 03 FPAI = -0.12216935E 02  
Z = -0.64721960E 07 ZC = -0.13404883E 04 RDOT = -0.90238840E 03 FLP = -0.62943458E 04 PSIV = 0.11408557E 03  
XL = -0.16916132E 08 TAG = 0.60000000E 01 GLOAD = 0.21860251E 01 FLY = -0.43436646E 04 VA = 0.30350729E 04  
YL = -0.1C468161E 08 RCLL = -0.12460917E 03 ACC = 0.74486033E 02 RTGN = -0.29828779E 01 FPAA = -0.17296709E 02  
ZL = -0.64921529E 07 RLCT = -0.41254889E 01 DRAG = 0.19119070E 05 RTGL = 0.14780388E 02 PSAV = 0.12594049E 03

15 DEC. 1967 19 HR 32 MIN 20.73 SEC TMST 774469.2031 J.D. 2439840.3141 8 DAY 23 HR 7.8 MIN

X = -0.17034456E 08 XC = 0.30732780E 04 ALT = 0.10136925E 06 LAT = -0.18063914E 02 VI = 0.39532871E 04  
Y = -C.1C474458E C8 YC = -0.21935526E 04 R = 0.21020414E 08 LONG = 0.19473582E 03 FPAI = -0.15199818E 02  
Z = -0.64784517E C7 ZC = -0.11712252E 04 RDOT = -0.10364970E 04 FLP = -0.41500750E 04 PSIV = 0.11425101E 03  
XL = -0.16912313E 08 TAG = 0.60000000E 01 GLOAD = 0.22650371E 01 FLY = -0.67547852E 04 VA = 0.27587203E 04  
YL = -0.1C474229E 08 RCLL = -0.14843384E 03 ACC = 0.77411872E 02 RTGN = -0.24493155E 01 FPAA = -0.22068601E 02  
ZL = -0.64921529E 07 RLCT = -C.105C0000E 02 DRAG = 0.19819537E 05 RTGL = 0.12612200E 02 PSAV = 0.12779972E 03

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15 DEC. 1967 19 HR 32 MIN 25.73 SEC TMST 774474.2031 J.D. 2439840.3142 8 DAY 23 HR 7.9 MIN

X = -0.17019336E 08 XC = 0.29708402E 04 ALT = 0.95861750E 05 LAT = -0.18083968E 02 VI = 0.36520541E 04

Y = -0.10484697E 08 YC = -0.19164202E 04 R = 0.21014892E 08 LONG = 0.19476263E 03 FPAI = -0.18639879E 02

Z = -0.64837489E 07 IC = -0.91593756E 03 RDOT = -0.11672655E 04 FLP = 0.20504119E 04 PSIV = 0.11280948E 03

XL = -0.16905494E 08 TAG = 0.60000000E 01 GLOAD = 0.23625920E 01 FLY = -0.80245763E 04 VA = 0.24824845E 04

YL = -0.10480493E 08 RCLL = 0.16566666E 03 ACC = 0.78457483E 02 RTGN = -0.22541797E 01 FPAIA = -0.28047303E 02

ZL = -0.64921929E 07 DRAG = 0.20705980E 05 RTGL = 0.10672201E 02 PSAV = 0.12775628E 03

15 DEC. 1967 19 HR 32 MIN 30.73 SEC TMST 774479.2031 J.D. 2439840.3142 8 DAY 23 HR 8.0 MIN

X = -0.17004817E 08 XC = 0.28291217E 04 ALT = 0.89795500E 05 LAT = -0.18100585E 02 VI = 0.33488799E 04

Y = -0.10493665E 08 YC = -0.16732108E 04 R = 0.21008813E 08 LONG = 0.19478547E 03 FPAI = -0.22029353E 02

Z = -0.64876373E 07 ZD = -0.64143067E 03 RDOT = -0.12561030E 04 FLP = 0.21616677E 04 PSIV = 0.11040223E 03

XL = -0.16904471E 08 TAG = 0.60000000E 01 GLOAD = 0.24915094E 01 FLY = -0.84599916E 04 VA = 0.22042745E 04

YL = -0.10486659E 08 RCLL = 0.16566666E 03 ACC = 0.78678954E 02 RTGN = -0.2242613E 01 FPAIA = -0.34739664E 02

ZL = -0.64921529E 07 RLCOT = 0. DRAG = 0.21829491E 05 RTGL = 0.90010462E 01 PSAV = 0.12668813E 03

15 DEC. 1967 19 HR 32 MIN 35.73 SEC TMST 774484.2031 J.D. 2439840.3143 8 DAY 23 HR 8.1 MIN

X = -0.16991122E 08 XC = 0.26418073E 04 ALT = 0.83407000E 05 LAT = -0.18113652E 02 VI = 0.30372109E 04

Y = -0.10501459E 08 YC = -0.14483194E 04 R = -0.21002415E 08 LONG = 0.19480424E 03 FPAI = -0.25221953E 02

Z = -0.64901924E 07 ZC = -0.38454544E 03 RDOT = -0.12942344E 04 FLP = 0.22343999E 04 PSIV = 0.10747000E 03

XL = -0.169050847E 08 TAG = 0.60000000E 01 GLCAC = 0.25734015E 01 FLY = -0.87446393E 04 VA = 0.19264394E 04

YL = -0.10492820E 08 RCLL = 0.16566666E 03 ACC = 0.77024289E 02 RTGN = -0.22586879E 01 FPAIA = -0.42208223E 02

ZL = -0.64921929E 07 RLCOT = 0. DRAG = 0.22563974E 05 RTGL = 0.76198538E 01 PSAV = 0.12531484E 03

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15 DEC. 1967 19 HR 32 MIN 40.73 SEC TMSI 774489.2031 J.D. 2439840.3143		8 DAY 23 HR 8.2 MIN	
<u>x</u>	= -0.16978467E 08	<u>XC</u>	= 0.24139987E 04
<u>y</u>	= -0.10508186E 08	<u>YC</u>	= -0.12429273E 04
<u>z</u>	= -0.64915416E C7	<u>ZC</u>	= -0.16608278E 03
<u>XL</u>	= -0.16897191E 08	<u>TAG</u>	= 0.60060000E 01
<u>YL</u>	= -C.10498983E 08	<u>RCLL</u>	= 0.17994271E 03
<u>ZL</u>	= -0.64921929E C7	<u>RLDOT</u>	= 0.
<u>x</u>	= -0.16967024E 08	<u>XC</u>	= 0.21609261E 04
<u>y</u>	= -0.10513935E 08	<u>YC</u>	= -0.10652634E 04
<u>z</u>	= -0.64915468E C7	<u>ZC</u>	= -0.25700229E 01
<u>XL</u>	= -0.16893191E 08	<u>TAG</u>	= 0.6c006000E 01
<u>YL</u>	= -0.10505142E 08	<u>ROLL</u>	= 0.17979167E 03
<u>ZL</u>	= -0.64921929E C7	<u>RLDOT</u>	= 0.

15 DEC. 1967 19 HR 32 MIN 45.73 SEC TMSI 774494.2031 J.D. 2439840.3145		8 DAY 23 HR 8.2 MIN	
<u>x</u>	= -0.16969418E 08	<u>XC</u>	= 0.21609261E 04
<u>y</u>	= -0.10513935E 08	<u>YC</u>	= -0.10652634E 04
<u>z</u>	= -0.64915468E C7	<u>ZC</u>	= -0.25700229E 01
<u>XL</u>	= -0.16893191E 08	<u>TAG</u>	= 0.6c006000E 01
<u>YL</u>	= -0.10505142E 08	<u>ROLL</u>	= 0.17979167E 03
<u>ZL</u>	= -0.64921929E C7	<u>RLDOT</u>	= 0.
<u>x</u>	= -0.16956861E C8	<u>XC</u>	= 0.19060034E 04
<u>y</u>	= -0.1C518928E 08	<u>YC</u>	= -0.94076223E 03
<u>z</u>	= -0.64916372E C7	<u>ZC</u>	= 0.11916292E 03
<u>XL</u>	= -C.16889359E 08	<u>TAG</u>	= 0.60060000E 01
<u>YL</u>	= -0.1C5113C1E 08	<u>RCLL</u>	= 0.17979167E 03
<u>ZL</u>	= -0.64921929E C7	<u>RLCCT</u>	= 0.

15 DEC. 1967 19 HR 32 MIN 50.73 SEC TMSI 774499.2031 J.D. 2439840.3145		8 DAY 23 HR 8.3 MIN	
<u>x</u>	= -0.16956861E C8	<u>XC</u>	= 0.19060034E 04
<u>y</u>	= -0.1C518928E 08	<u>YC</u>	= -0.94076223E 03
<u>z</u>	= -0.64916372E C7	<u>ZC</u>	= 0.11916292E 03
<u>XL</u>	= -C.16889359E 08	<u>TAG</u>	= 0.60060000E 01
<u>YL</u>	= -0.1C5113C1E 08	<u>RCLL</u>	= 0.17979167E 03
<u>ZL</u>	= -0.64921929E C7	<u>RLCCT</u>	= 0.
<u>x</u>	= -0.16956861E C8	<u>XC</u>	= 0.64912500E 05
<u>y</u>	= -0.94076223E 03	<u>YC</u>	= 0.20983906E 08
<u>z</u>	= -0.64916372E C7	<u>ZC</u>	= -0.11054949E 04
<u>XL</u>	= -C.16889359E 08	<u>TAG</u>	= 0.23822138E 01
<u>YL</u>	= -0.1C5113C1E 08	<u>RCLL</u>	= 0.57158564E 02
<u>ZL</u>	= -0.64921929E C7	<u>RLCCT</u>	= 0.

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15 DEC. 1967 19 HR 32 MIN 55.73 SEC TMST 774504.2031 J.D. 2439840.3146 8 DAY 23 HR 8.4 MIN  
X = -0.16947927E 08 XC = 0.16727403E 04 ALT = 0.59701500E 05 LAT = -0.18136646E 02 VI = 0.18944807E 04  
Y = -0.10523427E 08 YC = -0.86688091E 03 R = 0.20978693E 08 LONG = 0.19483957E 03 FPAI = -0.31080191E 02  
Z = -0.649C8258E 07 ZC = 0.19878201E 03 RDOT = -0.97800149E 03 FLP = 0.27646754E 02 PSIV = 0.93857981E 02  
XL = -0.16885526E 08 TAG = 0.60000000E 01 GLOAD = 0.21698271E 01 FLY = -0.76033918E 04 VA = 0.99766635E 03  
YL = -0.1C517458E C8 ROLL = 0.17979167E 03 ACC = 0.46302257E 02 RTGN = -0.27537765E 01 FPAA = -0.78605070E 02  
ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.190086C6E 05 RTGL = 0.47709797E 01 PSAV = 0.12363148E 03

15 DEC. 1967 19 HR 33 MIN 0.73 SEC TMST 774509.2031 J.D. 2439840.3146 8 DAY 23 HR 8.5 MIN  
X = -0.1694CC74E 08 XC = 0.14754698E 04 ALT = 0.5513250E 05 LAT = -0.18137515E 02 VI = 0.17109380E 04  
Y = -0.1C527661E 08 YC = -0.83207076E 03 R = 0.20974130E 08 LONG = 0.19484091E 03 FPAI = -0.29731995E 02  
Z = -0.64897133E 07 ZC = 0.24073994E 03 RDOT = -0.84652882E 03 FLP = 0.52440705E 02 PSIV = 0.90884438E 02  
XL = -0.1688169CE 08 TAG = 0.60000090E 01 GLOAD = 0.19598620E 01 FLY = -0.68676068E 04 VA = 0.84940845E 03  
YL = -0.1C523614E 08 RCLL = 0.1795625CE 03 ACC = 0.36255928E 02 RTGN = -0.29470680E 01 FPAA = -0.87391447E 02  
ZL = -0.64921529E C7 RLCT = -0.11000000E 02 DRAG = 0.17169518E 05 RTGL = 0.45444958E 01 PSAV = 0.12638577E 03

15 DEC. 1967 19 HR 33 MIN 5.73 SEC TMST 774514.2031 J.D. 2439840.3147 8 DAY 23 HR 8.6 MIN  
X = -0.16933C32E 08 XC = 0.13597998E 04 ALT = 0.51194750E 05 LAT = -0.18137558E 02 VI = 0.16260365E 04  
Y = -0.1C531876E 08 YC = -0.86327260E 03 R = 0.20970186E 08 LONG = 0.19484099E 03 FPAI = -0.26811338E 02  
Z = -0.64885C81E 07 ZC = 0.22293422E 03 RDOT = -0.73343052E 03 FLP = 0.17774657E 04 PSIV = 0.90166100E 02  
XL = -0.16877E52E 08 TAG = 0.60000000E 01 GLOAD = 0.17634553E 01 FLY = -0.59214727E 04 VA = 0.73344781E 03  
YL = -0.1C529166E 08 RCLL = 0.16329166E 03 ACC = 0.29376850E 02 RTGN = -0.30012696E 01 FPAA = -0.89600739E 02  
ZL = -0.64921529E C7 RLCT = 0. DRAG = 0.15456234E 05 RTGL = 0.45027170E 01 PSAV = 0.21460356E 03

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EV 2

CR C 4.994125CE C4 LESS THAN 5.000000E 04 -0. -0.  
61 7CC -C  
2C -C -C

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-0.

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